PRINCE WILLIAM SOUND MANAGEMENT AREA

2000 ANNUAL FINFISH MANAGEMENT REPORT

By:
J. Johnson
Daniel Sharp
Tim Joyce
Steve Moffitt

Regional Information Report No. 2A02-02

Alaska Department of Fish and Game
Division of Commercial Fisheries, Central Region
333 Raspberry Road
Anchorage, Alaska 99518

February 2002

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2000 PRINCE WILLIAM SOUND AND COPPER RIVER COMMERCIAL SALMON FISHERIES

MANAGEMENT AREA DESCRIPTION

Prince William Sound (PWS) management area encompasses all coastal waters and inland drainages entering the northcentral Gulf of Alaska between Cape Suckling and Cape Fairfield (Appendix A.1). This area includes the Bering River, Copper River and all of Prince William Sound with a total adjacent land area of approximately 38,000 square miles.

The salmon management area is divided into eleven districts that correspond to the local geography and distribution of the five species of salmon harvested by the commercial fishery. Management of all districts is carried out with the objective of achieving escapement goals for the major species while allowing for orderly harvest of all fish surplus to spawning requirements. In addition, the department follows regulatory plans to manage fisheries and assist private non-profit (PNP) salmon hatcheries in achieving cost recovery and broodstock objectives.

Six salmon hatcheries contribute to the area's fisheries. Prince William Sound Aquaculture Corporation (PWSAC), the regional aquaculture association, operates five of these hatcheries. Gulkana Hatchery in Paxson augments production of Copper River sockeye salmon. Cannery Creek Hatchery located on the north shore of the sound, and Armin F. Koernig (AFK) Hatchery in the southwestern sound produce pink salmon. Wally Noerenberg Hatchery in the northwestern sound produces pink, chum, and coho salmon, and Main Bay Hatchery in the western sound produces sockeye salmon. Valdez Fisheries Development Association (VFDA) operates Solomon Gulch Hatchery in Port Valdez, which produces pink and coho salmon.

Allowable gear types for salmon fishing includes purse seines, drift gillnets, and set gillnets. Drift gillnet permits are the most numerous and are allowed in the Bering River, Copper River, Coghill, Unakwik and Eshamy Districts. Set gillnet fishing is allowed only in the Eshamy District. Purse seine fishing is allowed in the Eastern, Northern, Unakwik, Coghill, Northwestern, Southwestern, Montague and Southeastern Districts.

As an avenue for the commercial fishing industry to formally provide management recommendations to the department, representatives from PWS area processors, gear groups, and aquaculture associations participate in an advisory body known as the PWS Salmon Harvest Task Force.

OVERVIEW OF AREA WIDE SALMON FISHERIES

Commercial salmon harvest of 46.2 million fish made 2000 the third highest year on record (Appendix A.3). This harvest was comprised of 38.89 million pink, 1.43 million sockeye, 5.16 million chum, 714,000 coho, and 32,400 chinook salmon (Appendix A.2). A majority of the catch, 33.37 million fish, was common property harvest, while 12.86 million were sold for hatchery cost recovery (exclusive of roe/meal sales). Harvests sockeye and coho salmon were within the pre-season projection range, while harvests for pink and chum salmon were above the pre-season projection range and chinook salmon harvest was below the pre-season projection range (Appendix Table A.9). Fifteen processors operated in PWS during the 2000 season (Appendix Table A.10).

Estimated value of the combined commercial salmon harvest was $52.70 million, including hatchery sales (Appendices A.5 and A.6). During the 2000 season, 535 of the 538 drift gillnet permit holders fished. The drift gillnet catch was valued at $22.47 million, for an average earnings of $42.0 thousand per participant. The set gillnet catch was valued at $1.0 million, for an average earnings of $35.6 thousand for the 28 out of 30 participating permits. The seine fishery was worth $18.86 million for an average ex-vessel value of $144.0 thousand for the 131 of 268 permit holders that participated (Appendices A.5 and A.8). Revenue generated for hatchery operations (including roe/meal sales) was approximately $10.64 million.

2000 SALMON SEASON SUMMARY BY DISTRICT

COPPER RIVER DISTRICT

Introduction

The Department of Fish and Game, with allocative direction from the Board of Fisheries, has consistently endeavored to manage salmon runs to the Copper River (Appendix B) to assure sustained yield and to meet user group allocations, as outlined in 5 AAC 24.360. COPPER RIVER DISTRICT SALMON MANAGEMENT PLAN. The past decade can be measured more by its successes than shortfalls. At the December 1999 meeting in Valdez, the Board of Fisheries amended the Copper River Chinook Salmon Fishery Management Plan to provide the department with tools and discretion to manage early season fishing as necessary to maintain spawning escapement within the range of 28,000 to 55,000 chinook salmon. During the 2000 season, the department enacted provisions in the plan with positive results.

Management tools currently available to the department have allowed it to consistently respond inseason to indices of abundance and to regulate commercial salmon harvest accordingly. In 2000, the department began reassessing the feasibility of using dip nets and small mesh gillnets to test-fish in the lower river for early season sockeye salmon. Accurately monitoring inriver movement of salmon above the commercial fishing district and below Miles Lake sonar has long been recognized as a useful tool that could add precision to early season management actions. The department has been pursuing lower Copper River run strength assessment projects since 1992.

Working in the lower Copper River in May has proven to be challenging. The department received new funding to broaden its test-fishing efforts in 2001. Initial test fishing results may be used to confirm that inriver migration has begun, while a long-term goal would be to develop a relationship between test fish indices and subsequent sonar counts. The Native Village of Eyak has also proposed a lower river assessment project that has potential to further help characterize run entry well below the Miles Lake sonar counters. They are currently seeking federal funding for their project to begin in 2001.

In managing commercial harvest to provide for upriver escapement and allocations, the department's primary measure of inseason success is the escapement index provided by the Bendix sonar counters at Miles Lake. Upriver subsistence harvests have averaged 196,140 salmon from 1995-1999. An increasing trend in subsistence harvests is reflected annually through additions to the inriver goal. Additionally, aerial escapement indices, coded wire tag data, and weir data provide supporting information regarding the department's relative success in meeting provisions of the Copper River District Salmon Management Plan. Achieving biological escapement goals and satisfying other management-plan provisions have remained the department's primary management objectives.

Background

Copper River District commercial fishing has opened in mid-May since the early 1960s. Fishing periods are now established inseason by emergency order following many years of "book openings" that formerly ran from Monday mornings to Friday evenings. Fishing time has generally been steadily reduced over the years in response to changing patterns in the fishery, increased efficiency of the fleet, and changes in allocations made by the Board of Fisheries. Two commercial fishing periods per week has been the recent pattern with the duration of a given fishing period dependent upon trends in escapement, harvest, and environmental conditions.

The upriver biological escapement goal for wild stock sockeye salmon is 300,000 fish, a number that has been constant since being adopted in 1972 and placed into regulation in 1980 (Fried 1994). The Copper River District Salmon Management Plan outlines the biological and allocative categories that comprise the inriver goal for Miles Lake sonar. Spawning escapement, subsistence harvest, sport fishery, hatchery brood, and hatchery surplus are the categories included in the management plan's inriver goal. Timing of enhanced fish passing Miles Lake sonar was determined from their timing in the commercial harvest adjusted for travel time from the commercial fishing district to Miles Lake.

Of the five categories contained within the inriver goal, the most significant increases over time have been in the hatchery surplus and subsistence categories. In the early 1980s, the inriver goal stood at 516,000 salmon. By 2000, the inriver goal totaled approximately 768,000 wild and enhanced salmon. In 2000, based upon the forecasted run of some 850,000 enhanced sockeye salmon to the Copper River, the hatchery surplus within the inriver goal was set at 230,500 sockeye salmon. Other inriver goal categories included 185,000 subsistence, 15,000 sport, 17,500 "other salmon" and 20,000 hatchery broodstock sockeye salmon for a total inriver goal of 768,000 salmon. During 2000, the escapement objective for the Miles Lake sonar counter was 739,145 salmon by August 3, the last scheduled day of counting for the sonar project.

The category of subsistence salmon within the inriver goal is expressed as a range. The number of fish added to the inriver goal for subsistence use is set annually based on the harvest in recent years. In 2000, the upper end of the Glennallen Subdistrict harvest range and the mid-point of the Chitina Subdistrict harvest range were combined and incorporated into the inriver goal. The number of surplus sockeye salmon within the inriver goal is determined annually based on the Gulkana Hatchery run forecast and a preseason estimate of the commercial harvest exploitation rate that wild stocks can likely sustain during the late June and July mixed-stock fishery in the Copper River District. It is important to note that these surplus salmon do not fulfill any biological escapement need, nor are they specifically linked to any upriver subsistence harvest or sport allocations. An unknown percentage of the substantial hatchery surplus is taken during July and August in these upriver fisheries.

Preseason Outlook and Harvest Strategy

The 2000 harvest forecast for the Copper River District was 60,800 chinook, 1.36 million sockeye, and 295,000 coho salmon. Gulkana Hatchery located north of Paxson Lake was expected to contribute approximately 640,000 sockeye salmon to the commercial catch. Actual sockeye salmon harvest of 880,334 for 2000 ranked as the fifteenth largest on record (Appendix B.1), but was significantly below the recent ten-year average harvest of 1.52 million sockeye salmon. Harvest of 31,259 chinook salmon was well below the preseason projection and ranked as the sixteenth largest chinook harvest on record. The 2000 inriver goal for salmon passing Miles Lake was set at 768,000 salmon. This number equated to a preseason sonar goal of 739,000 salmon by August 3, the normal season ending date for sonar counting at Miles Lake. By August 3, 2000, 587,497 salmon had passed the Miles Lake sonar counter (Appendix B.8).

The traditional fishing schedule for the Copper River District is two 24-hour periods per week. Periods begin at 7:00 a.m. on Mondays and 7:00 p.m. on Thursdays. Lengths of fishing periods are adjusted by emergency order as needed. After August 7, the management priority switches to coho salmon and the season was anticipated to begin with one 24-hour period per week. Additional fishing time would depend upon the strength of the return determined from harvest and escapement information. Fishing periods during the coho fishery begin at 12:00 noon.

Early in the season, management of the Copper River District is based on actual harvest as compared to anticipated harvest (Appendix B.3, B.4). This is the most reliable method of evaluating early run strength prior to the installation of the inriver sonar at Miles Lake. In late May, sonar counts and commercial harvest information become the primary factors governing management of the fishery. By mid-June, aerial estimates of sockeye escapement in Copper River Delta systems become an additional consideration when scheduling commercial fishing periods. Due to the many spawning systems in the lower Copper River Delta, an actual weekly escapement index of selected sockeye systems is compared to an anticipated weekly escapement index. The escapement index goal for the Copper River Delta is 90,000 sockeye salmon.

2000 Sockeye and Chinook Salmon Fishery Season Summary

The first commercial fishing period (Appendix B.26) occurred on Monday, May 15 for 12 hours and included a central statistical area closure inside the barrier islands as stipulated in 5 AAC 24.361 COPPER RIVER CHINOOK SALMON FISHERY MANAGEMENT PLAN (Appendix B.7) to reduce the commercial harvest rate on chinook salmon. The chinook salmon harvest of 5,875 was less than anticipated while the sockeye salmon harvest of 38,851 slightly exceeded the predicted semi-weekly harvest of 35,477 fish (Appendices B.5, B.6). Anecdotal reports consistently indicated that there were few sockeye salmon caught inside the barrier islands at the period's opening. Many harvesters concentrated their efforts in those limited open areas inside the barrier islands during the initial low water to target chinook salmon. Once chinook salmon catches tapered off, most of the fleet fished outside the barrier islands where a majority of the sockeye salmon harvest occurred during the first period.

With water levels remaining below average, the second fishing period on May 19 was limited to 12 hours and the inside statistical area remained closed. Harvest pattern was similar to that of the first period. Following initial effort directed towards chinook salmon, many boats moved outside to target sockeye salmon. The chinook salmon harvest of 5,564 was roughly half the anticipated while the sockeye harvest of 85,602 was approximately 40,000 fish higher than anticipated (Appendix B.2). Sockeye salmon catches were reported to have improved slightly inside the barrier islands for the second period, but most reports indicated that a majority of the sockeye salmon harvest was caught outside the islands. Indications from the commercial harvest were that chinook were entering the Copper River while inriver sockeye salmon migrations had not begun in earnest.

Sonar counting began May 18 on the south bank at Miles Lake. Initial counts indicated that few salmon were passing the sonar site (Appendices B.2, B.9). Counting began May 29 on the north bank after iceberg conditions and water levels improved. During initial low flows, salmon below Miles Lake appeared to be much less south-bank oriented than they are later in the season at higher water levels. Initial counts were higher than expected on the north bank in 2000.

The third opening on May 22 was again for 12-hours, but the inside statistical area was opened for the first time. The chinook salmon harvest increased to 7,278 fish and the sockeye salmon harvest declined to 68,603 fish. Reports from the fishing grounds indicated that sockeye salmon were plentiful inside the barrier islands for the first time during the season indicating greater upriver movement. The fourth period, scheduled for May 26, was cancelled to take advantage of what appeared to be the first significant

push of sockeye salmon to enter the river. Daily salmon passage improved and exceeded the anticipated daily passage beginning May 27.

Because of the sonar deficit at the time and reports from the fishing grounds that the sockeye salmon run did not appear to be as large as in past years, the next fishing period was limited to 6 hours centered around high tide. Limiting the opening to bracket the high tide reduced harvest potential of the inside fishery while supplying needed information on run entry strength following the previously cancelled fishing period. It also reduced fleet efficiency by not providing much time for a majority of the fleet to travel and prospect for fish concentrations in the ocean. The harvest of 80,820 sockeye and 4,070 chinook salmon in a 6-hour period on May 29 occurred during what is traditionally the peak early season harvest period for sockeye salmon.

Sonar passage on May 29 was 9,864 salmon versus an anticipated passage of 6,173 salmon. Counts improved on May 30 to 12,452 salmon versus an anticipated count of 7,275 salmon. With daily sonar passage exceeding anticipated passage rates, a 12-hour period was scheduled for June 1. On June 1, the actual cumulative sonar count past Miles Lake stood at 53,820 salmon versus an anticipated cumulative count of 70,774 salmon, a deficit of 16,956 salmon. The period was again kept short in deference to the sonar deficit, even as the current daily passage rate was exceeding the anticipated passage.

Harvest on June 1 was 78,888 sockeye salmon compared to an anticipated semiweekly harvest of 96,622 fish. Fleet size in the Copper River District was 439 boats on June 1, a reduction of 60 permits from the May 29 period, due to boats departing for Coghill District to target enhanced chum salmon at Wally Noerenberg Hatchery. Another 12-hour period on June 5 resulted in a harvest of 46,023 sockeye salmon versus an anticipated harvest of 65,441 sockeye salmon. Daily sonar passage rates, which had shown steady improvement in late-May and early June, began to fall behind daily anticipated counts beginning June 4 and the fishery was closed following the June 5 fishing period. The fishery remained closed from June 6 until June 23, resulting in cancellation of four traditional fishing periods. Sonar counts improved as a result of the closure, although not as well as in recent years when stronger runs could pulse large numbers of salmon into the river during a closure.

When fishing resumed on June 23, enhanced sockeye salmon contributed between 40% and 60% of the harvest. A 12-hour fishing period occurred on June 23 followed by 24-hour periods on June 26 and June 29. On June 29, 2000, anticipated and actual cumulative sonar counts were at approximately 350,000 salmon. By the first week in July, the number of enhanced fish passing the sonar is generally greater than the number of wild fish. Enhanced contributions to the commercial harvest were highest (i.e. greater than 75%), during the July 3 fishing period. Most fish passing the sonar during May and June are assumed to be wild stocks. Coded wire tag data from the June 5 fishing period indicated that 99% of the sockeye salmon harvested were either wild stocks or enhanced fish of Paxson Lake origin.

Beginning July 3, the fishery went on a schedule of two 36-hour periods per week until July 20 when fishing time was reduced to 24 hours. On July 18, the sonar count was 74,000 below the anticipated level. It was apparent that the enhanced sockeye return to Gulkana Hatchery was below the forecasted level. Copper River Delta escapements were well above desired levels with an aerial survey index of over 67,000. Anticipated escapements for that date were nearly 48,000. Bering River escapements were close to anticipated levels.

On July 24, fishing time was reduced to 12 hours, as escapement past Miles Lake was 102,000 below the anticipated level for that date. Bering River escapements were again falling behind anticipated levels and the district was not reopened. Copper River Delta escapements, while still ahead of anticipated were less so than on July 18.

Effort dropped dramatically during this time period due to the reopening of the Eshamy District on July 17. From 203 drift gillnet permits fishing the Copper River District on July 17, effort dropped to 34 permits by July 28. A series of twice weekly 12-hour periods from July 24 until August 4 closed out the sockeye salmon season.

The actual 2000 sockeye salmon harvest of 880,334 ranked as the fifteenth largest on record (Appendix B.1), but was significantly below the recent ten-year average harvest of 1.51 million sockeye salmon. Age 1.3 was the predominant year class, making up over 80% of the catch (Appendix B.17). Harvest of 31,259 chinook salmon was well below the preseason projection and ranked as the sixteenth largest chinook harvest on record. Age 1.3 was the predominant year class, making up over 69% of the chinook salmon catch (Appendix B.18).

The 2000 inriver goal for salmon passing Miles Lake was set at 768,000 salmon. This number equated to a preseason sonar goal of 739,000 salmon by August 3, the normal season ending date for sonar counting at Miles Lake. By August 3, 2000, 587,497 salmon had passed the Miles Lake sonar counter. The upper Copper River aerial survey index was slightly below the ten-year average for chinook salmon and well below the 10-year average for sockeye salmon (Appendices B.11 – B.13).

In response to the weakness detected in the early portion of the return, the department severely limited fishing time early in the season and eventually closed the commercial fishery for 17 days in June. Extended closure of the commercial fishery, in addition to bolstering upriver escapement, significantly boosted wild stock sockeye salmon escapement in Copper River Delta spawning systems. With Copper River Delta spawning systems on track towards meeting their escapement goals early in the season and the Gulkana Hatchery return appearing to be well below the forecast, the need to put 230,050 surplus hatchery salmon past the Miles Lake sonar counter was reduced considerably.

At seasons end, the sockeye salmon aerial escapement index for the Copper River Delta systems was 98,045, or 9%, above the index goal of 90,000 (Appendix B.10).

2000 Coho Salmon Fishery Season Summary

Copper River District's coho salmon harvest of 304,944 fish was only 3% above the projected harvest of 295,000 coho salmon. Coho salmon season officially began at 7:00 am on August 7 with a single 24-hour period for the week. If escapements can support it, two fishing periods per week has been the most recent recommendation from the Salmon Harvest Task Force. Deciding on the most appropriate fishing strategy to apply to the coho salmon return has been a contentious issue for the past few seasons. In order to maximize quality, processors universally prefer two shorter 24-hour periods per week. Fishers tend to prefer a single, longer fishing period per week, both for logistical reasons and for conservation reasons.

Arriving at a consensus over harvest strategy between processors and fishers has proven to be difficult to achieve. Overriding this debate was the concern about the pattern of weak returns to the Copper River District since 1996. The past three years have seen harvests falling well below projections and seasons ending prematurely due to weak returns. In 1997, coho salmon escapement into Copper River Delta streams (Appendix B.16) was weak enough to impose a coho salmon bag limit reduction for sport fishers. In 1998, weather during the fall precluded an accurate assessment of coho salmon escapement for the year. Because of the recent history of poor coho returns and inconclusive escapement data, the department intended to approach the season with extreme caution. A harvest strategy of allowing one 24-hour period per week was utilized as long as catch data indicated there was some strength to the return, unless escapements justified additional fishing time.

Preliminary estimated harvest from the August 7 period of 12,000 coho salmon indicated early strength to the run. On Aug 14 during a 24-hour fishing period, the preliminary harvest estimate was 34,728 coho salmon, which was close to the predicted harvest for that date of 39,000 coho salmon. Coho salmon escapements were improving, though still below anticipated levels (Appendix B.15). Low water was thought to be impeding entry of coho salmon into many freshwater systems since coho escapement numbers appeared strong in many of the larger lake-fed systems.

Beginning August 21, weekly fishing periods of 36 hours each occurred through the end of the season. Harvest for the August 21 period of 90,735 for the Copper River District and 6,748 for the Bering River District exceeded the projected harvest for mid-August of 61,000 for the two districts. Under a one 36-hour period per week schedule, escapements were improving, but still lagging due to low water levels.

During an aerial escapement survey on Sept. 7, escapement for the Copper River was 18,658 compared to the desired escapement for that date of 35,000. Escapement for the Bering River was 10,055 compared to the desired escapement for that date of 19,000. Good escapements occurred in Copper River Delta systems where visibility was good such as Martin, Eyak, and Edwardes Rivers. Sport harvest was also very good in Copper River Delta systems and supported the assessment that escapements were good.

No surveys were flown after September 7 due to rain and poor flying conditions. This helped reverse the uncharacteristic low-water condition and improve conditions for coho salmon entry into fresh water. Counts of coho salmon at the US Forest Service weir at Mile 18 indicated escapements were doing well as did continued good sport fishing in Copper River Delta systems. By September 18 fleet size was reduced when some processors ceased operations. The season closed October 8.

Final coho harvest was 304,944, very close to the anticipated catch of 291,280 (Appendices B.5 and B.14). The catch was made up of 39% age 1.1 and 60% age 2.1 fish (Appendix B.19).

BERING RIVER DISTRICT

Preseason Outlook and Harvest Strategy

The 2000 harvest forecast for the Bering River District was 20,000 sockeye salmon and 120,500 coho salmon (Appendices B.20, B.23). Commercial fishing periods in the Bering River District generally coincide with the Copper River District. The Bering River District escapement index goal is 32,000 for sockeye salmon and 23,000 for coho salmon.

The sockeye salmon harvest of 1,279 was well below the preseason projection and less than the recent ten year average of 19,444. Observed escapement indices for the Bering River system were 39,000 sockeye salmon and 10,370 coho salmon. Coho salmon escapements were undoubtedly better than documented due to the fact no surveys could be flown after September 7, which historically is prior to the mid-point of the escapement.

2000 Sockeye Salmon Season Summary

Bering River District generally opens the second or third week of June. In 2000, the first period was for 24 hours on Monday, June 26 (Appendix B.21). **A**erial surveys for 2000 started on June 6 when 640 salmon were seen in the Bering River versus an anticipated index count of over 746 (Appendix B.22). The district was opened concurrently with Copper River District from June 26 through July 21. From

July 21 until August 7 when coho salmon management started, Bering River District remained closed due to escapement shortfall.

During an aerial survey on June 26, 19,400 sockeye salmon were observed versus an anticipated index count of 12,810 fish. During the July 20 survey, the aerial index count of 19,780 was still below the desired level of 23,342, despite relatively light effort. Little improvement had occurred since the prior survey on July 7. For that reason Bering River District was not reopened on July 24 with Copper River District and did not reopen again until coho salmon directed management started on August 7.

2000 Coho Salmon Season Summary

Coho salmon season is managed concurrently with the Copper River and typically begins in early August. The first commercial fishing period for the Bering River District occurred on August 7 and attracted less than three permit holders. Effort remained low until the August 28 fishing period, when 26 permit holders landed 6,748 coho salmon. This catch was significantly lower than the anticipated catch of 33,667, probably because of low fishing effort. While early season catches were below anticipated, the mid and late-season harvests were above anticipated levels. Total catch was 56,329, well below the anticipated harvest of 120,000. Inability to survey escapements after September 7 prevented more precise management (Appendix B.24). Age composition of the catch was 27% age 1.1 and 70% age 2.1 (Appendix B.25).

COGHILL DISTRICT (PRIOR TO JULY 21)

Preseason Outlook and Harvest Strategy

Management strategy prior to July 21 (gillnet only fishery) is concerned primarily with the return of sockeye salmon to Coghill Lake and the return of chum salmon to Wally Noerenberg Hatchery. Coghill sockeye are managed for a biological escapement goal of 20,000 to 40,000 spawners. For the 2000 season, management strategies were based on achieving a point goal of 25,000 plus PWSAC's broodstock needs, while hatchery chum are managed to satisfy the allocation between common property harvest and PWSAC's corporate escapement.

The 2000 wild sockeye salmon return to Coghill Lake was forecast to be 588,800 fish. Meeting the 2000 point-escapement goal for Coghill Lake of 25,000 sockeye salmon, plus 8,000 additional adults for restocking Main Bay Hatchery, left a forecast common property harvest of 555,800 fish.

The department's point estimate for the Wally Noerenberg Hatchery chum salmon return was 2.4 million fish. PWSAC's 2000 revenue goal for their non-pink salmon production was $3.9 million. PWSAC planned to harvest both chum and sockeye salmon to meet their 2000 revenue goal. Based on preseason estimates, revenue and brood stock requirements equated to approximately 1,646,000 Noerenberg chum salmon. With a strong Coghill Lake return forecast, Coghill District was expected to open for a schedule of two periods per week beginning in early June. Opening waters of Esther Subdistrict was to depend upon the progress of PWSAC's corporate harvest at Noerenberg Hatchery. Fishing periods in Esther Subdistrict were to be based on strength of the Wally Noerenberg Hatchery chum salmon return and PWSAC's sales harvesting. If the drift gillnet fleet was not able to harvest surplus chums returning to Wally Noerenberg Hatchery, the BOF provided the department with authority to open the hatchery terminal area to seine gear prior to July 21.

2000 Season Summary

Coghill District opened on June 1, 2000 with a 24-hour fishing period (Appendices C.1, C.2, C.11). PWSAC had agreed to allow the drift gillnet fleet to have increased access to the early portion of the enhanced chum salmon return when prices were anticipated to be higher. PWSAC had expressed confidence that with the large forecasted return they would be able to meet their revenue goal even with increased common property harvest early in the run. With the large forecasted sockeye salmon return to Coghill Lake, the department was confident of meeting the 33,000 fish goal and was more concerned with over-escapement of Coghill Lake (Appendices C.4 – C.6).

Preliminary harvest estimates for the first period were 9,293 chum salmon and 26 sockeye salmon. PWSAC began harvesting at Wally Noerenberg Hatchery on June 1 and sold 28,000 chum salmon. Both common property harvest and cost recovery harvest indicated early strength in the enhanced chum run that justified putting the district on a fishing schedule until further notice. Beginning June 5, the department established a schedule of two 24-hour periods per week in waters of Coghill District south of 61^{o} 00.00' N. Latitude, excluding waters of the Wally Noerenberg Hatchery Terminal Harvest Area and Special Harvest Area. This schedule was reduced to 12-hour periods on Friday June 9, because processors lacked adequate tender capacity to handle the catch possible in 24 hours. The open area was also expanded to the north to provide better information on the strength of the Coghill Lake return. This period was extended to 24 hours when processors indicated they would send additional tenders to the area. On June 15, fishing was allowed for 24 hours. At this point in the run, the enhanced return appeared to be far stronger than forecasted. PWSAC had harvested 549,000 chum salmon, well ahead of its anticipated harvest of 256,000. Coghill weir was installed on June 14 (Appendix C.3).

The pattern of two 24-hour openings per week for Coghill District (excluding the Terminal and Special Harvest Areas) continued through July 3. On July 6, the Terminal and Special Harvest Areas to a line of buoys in front of the barrier seine were also included in the 24-hour opening. At this point in the return, common property harvest was 1.24 million chum salmon and 70,000 sockeye salmon. PWSAC's corporate escapement harvest was expected to be finished as of July 6. Starting July 10, Esther Subdistrict including the Terminal and Special Harvest Areas to a line of buoys in front of the barrier seine was given an additional 24 hours of fishing time to increase the harvest rate on Wally Noerenberg Hatchery chum salmon.

On July 17, with sockeye salmon escapement into Coghill Lake at only 20,369 compared to the anticipated level of approximately 25,000 for that date, only Esther Subdistrict, including the Terminal and Special Harvest Areas to a line of buoys in front of the barrier seine, was opened for 48 hours. The remainder of Coghill District stayed closed due to Coghill Lake sockeye salmon escapement lagging behind the desired level.

Esther Subdistrict, including the Terminal and Special Harvest Areas to a line of buoys in front of the barrier seine, was opened for 24 hours on July 20, the final period for drift gillnet fishermen. A catch of 3,828 chum salmon indicated the chum run was largely over. The strategy of providing increased fishing time in the hatchery subdistrict resulted in the entire chum return being efficiently harvested by the drift gillnet fleet. There were no surplus chum salmon in the hatchery terminal area on July 21, the end of the gillnet-only season in the district.

The final Coghill Lake sockeye salmon escapement goal of 25,000 was met by late July when a total of 28,446 sockeye salmon passed the weir. PWSAC eventually reduced their broodstock requirements for the Coghill Lake stock and harvested far less than their permit originally requested.

During 15 gillnet-only periods a harvest of 176,452 sockeye salmon and 1.6 million chum salmon occurred. Purse seiners caught only an additional 2,984 sockeye salmon after July 21 bringing the total harvest to 179,436 sockeye salmon, well short of the forecasted harvest of 555,800 sockeye salmon. Age and sex composition of this catch is presented in Appendices C.7 and C.8. The enhanced chum salmon return to Wally Noerenberg Hatchery far exceeded expectations. Common property harvest of 1.6 million chum salmon and hatchery cost-recovery harvest of 1.7 million exceeded the preseason forecast of total harvest forecast by approximately 900,000 fish.

UNAKWIK DISTRICT

2000 Season Summary

Unakwik District harvest for 2000 was 1,119 sockeye salmon with an incidental harvest of 20 chum salmon. The district is traditionally managed concurrently with Coghill District. The sockeye salmon harvest was well below the 10-year average harvest of 5,598 (Appendix C.9, C.10). The reduced harvest was likely due to strong returns and better fishing opportunities available in Coghill District. Unakwik District opened to both purse seine and gillnet gear on June 19 following a schedule of two 24-hour periods per week, primarily targeting sockeye salmon returns to Miners and Cowpen Lakes. Beginning July 10 a series of three 48-hour periods was allowed followed by a final 24-hour period on July 20. The district reopened in August to harvest pink salmon. There were two 12-hour periods during which seiners caught 20,485 pink salmon.

ESHAMY DISTRICT

Preseason Outlook and Harvest Strategy

Wild stock sockeye salmon returns to Eshamy Lake were forecasted to total 61,100 fish, 35,000 of which were needed to meet the midpoint of the lake's biological escapement goal of 30,000 to 40,000 sockeye salmon. Initially, Eshamy weir was not funded for the 2000 season, however the department was able to fund it at the last minute. With the expectation of not having escapement data, the department planned for conservative management of Main Bay Hatchery's Eshamy stock return by limiting fishing area in the Eshamy District. Waters south of Loomis Creek were not likely to open without reliable escapement data. Onsite returns to Main Bay Hatchery were projected to be 305,200 sockeye salmon composed of 7,200 Eyak stock, 8,800 Coghill stock, and 289,200 Eshamy stock.

Approximately 82% of PWSAC's non-pink salmon revenue was expected to come from sales of Wally Noerenberg Hatchery chum salmon with the remaining 18% coming from the smaller returns of sockeye salmon to Main Bay Hatchery. If PWSAC's non-pink salmon revenue goal was being achieved as planned, it was likely that the drift and set gillnet fleets would be given opportunity to harvest the projected 7,200 enhanced Eyak stock and a portion of the 289,200 enhanced Eshamy stock sockeye salmon expected to return to Main Bay Hatchery.

Directed harvesting of the expected small numbers of enhanced Eyak stock was planned to begin concurrently with the Copper River District opening in May. Twice weekly periods were expected to occur until mid-June when PWSAC would begin collecting Coghill stock brood fish. The small Eyak stock return to Main Bay Hatchery was forecasted to be only 7,200 adults. Once PWSAC completed their broodstock collection of Coghill stock sockeye, the department would assess PWSAC's progress towards meeting their corporate harvest goal at Wally Noerenberg Hatchery. Management for the enhanced

Eshamy stock was expected to begin in mid-July. With no broodstock requirements from the Eshamy stock return, the timing and frequency of common property openings in late July and August was to be balanced to provide for PWSAC's revenue needs and maintaining a high quality harvest.

Fishing time and area in Crafton Island Subdistrict was based on the status of PWSAC's cost recovery for non-pink salmon, escapement of wild pink and sockeye salmon in Eshamy District, and the strength of wild pink and chum salmon stocks returning to Northwestern and Coghill Districts. Eshamy Bay was not anticipated to open for a directed commercial fishery in mid-July or August as the Eshamy Lake wild sockeye salmon return was expected to be too small to support a directed commercial harvest, especially in the absence of escapement information. When the waters of Eshamy Bay and Crafton Island Subdistrict were closed for the protection of pink and sockeye salmon escapement, there would be concurrent closures of the eastern shore of Chenega Island to purse seine gear to further minimize the interception of wild Eshamy-bound fish.

The Special Harvest Area at the head of Main Bay was to be used by the hatchery operator for cost recovery harvesting during periods when the commercial fishery was closed. The commercial fleet could use the Special Harvest Area during scheduled periods. Unless opened by emergency order, the Alternating Gear Zone was to remain closed to commercial fishing to protect the hatchery barrier seine. It was expected the barrier seine would be removed during the Eshamy stock's return timing.

2000 Season Summary

Main Bay Subdistrict of Eshamy District opened May 15 with a schedule of twice weekly 36-hour fishing periods (Appendices D.1, D.9). The Alternating Gear Zone was opened to drift gillnet gear for the first period of each week, which began on a Monday, and to set gillnet gear for the second period of each week, which began on a Thursday. This was an earlier than normal opening due to the fact that the return of Eyak stock sockeye salmon was expected to be only 8,000 fish.

This schedule ended effective June 14 when the return of Eyak stock to Main Bay Hatchery was nearly complete and the return of Coghill stock was beginning. PWSAC began collecting broodstock on June 15. Due to the water pipeline break during the parent year, the return of Coghill stock adults was expected to fulfill only the need for broodstock.

Eshamy District excluding waters of the Alternating Gear Zone opened for 24 hours on July 17. PWSAC had achieved their non-pink salmon cost recovery by harvesting chum salmon at Wally Noerenberg Hatchery leaving the entire Eshamy stock of enhanced sockeye available for common property harvest. Coghill stock captured for broodstock remained inside the barrier seine in saltwater, necessitating closure of the Alternating Gear Zone until these fish moved into the freshwater holding pond. Due to the projected surplus of fish returning to Eshamy Lake, the newly funded operation of Eshamy weir, and the fact that the entire enhanced Eshamy run would be available for common property harvesting, the entire district was opened. Based on positive escapement numbers at Eshamy weir, a series of openings occurred through July and August. By July 21, the Eshamy weir count was well in excess of the anticipated escapement for that date (Appendices D.3 – D.6, D.8). By July 25, escapement at Eshamy weir was 9,803 compared to an anticipated escapement for that date of 4,936. On July 27, the Main Bay Hatchery Terminal Harvest Area including the Alternating Gear Zone to a line of buoys outside the barrier seine was opened. The limited area in the Alternating Gear Zone was included to minimize the build up of Eshamy stock sockeye along the barrier seine during closed periods. Eshamy Lake escapement remained ahead of expected levels throughout early August.

The barrier seine was removed on August 13 as Coghill stock sockeye salmon entered freshwater and the continuous closure of the Main Bay Hatchery Terminal Harvest Area and Alternating Gear Zone ended on August 14. By August 15 the Eshamy weir count was close to the anticipated for that date. By August 23, sockeye salmon escapement counts at Eshamy weir had dropped behind desired levels with 20,622 fish having passed versus an anticipated count 28,056. Therefore, the August 24 opening of the district was limited to waters north of the northern anadromous stream marker at Loomis Creek. This area reduction continued until August 31 when the entire Crafton Island Subdistrict was closed. Thereafter, only the Main Bay Subdistrict was opened on a schedule of two 24-hour fishing periods per week. On September 11 the schedule was expanded to 6.5 days per week. Due to lack of processor interest, catches had fallen off during periods leading up that time. When a processor was found, the fishing schedule was adjusted to facilitate a timely and convenient harvest of remaining surplus Main Bay Hatchery sockeye. During this period the Alternating Gear Zone was open during the first half of the period to drift gillnet gear and the second half of the period to set gillnet gear. If a gear group did not utilize the Alternating Gear Zone during its designated fishing time, the other gear group was allowed to fish there.

Final escapement for Eshamy Lake was 22,653 sockeye salmon and 20,515 pink salmon. Sockeye salmon escapement was well below the escapement goal range of 30,000 to 40,000 fish past the weir. Eshamy Lake sockeye salmon escapement was characterized by larger than expected escapements early in the run and very low escapements late in the run. Eshamy Bay and Crafton Island Subdistrict were closed to fishing during what should have been the last 25 percent of the Eshamy return. The lack of escapement despite these closures, and a comparison of actual to anticipated escapements in late August, indicated the run was early and not as large as it appeared to be during the early part of the season.

Total sockeye salmon harvest for the district was 336,190 fish, very close to the preseason forecast (Appendices D.1, D.2, D.7). Other catches included 675 chinook salmon, 515,258 pink salmon, 39,830 chum salmon, and 6,058 coho salmon.

GENERAL PURSE SEINE DISTRICTS

Preseason Outlook and Harvest Strategy

General purse seine districts include the Eastern, Northern, Unakwik, Coghill, Northwestern, Southwestern, Montague, and Southeastern Districts. Under 5 AAC 24.370 PRINCE WILLIAM SOUND MANAGEMENT AND SALMON ENHANCEMENT ALLOCATION PLAN, Southwestern District is closed prior to July 18; Coghill District is closed to purse seine gear prior to July 21, except under 5 AAC 24.368(f) WALLY NOERENBERG HATCHERY MANAGEMENT PLAN; and Esther Subdistrict may be opened to seine gear to prevent deterioration of fish quality of the harvestable surplus of chum salmon that is not being adequately harvested by the drift gillnet fleet. Beginning July 21, both purse seine and drift gillnet gear are allowed in Coghill District. Seine gear is allowed in the district as long as pink salmon are numerically predominant in the harvestable surplus. Fishing periods in all districts are established by emergency order.

General purse seine districts are managed to achieve wild pink and chum salmon escapement goals by district and allow for orderly harvest of surplus wild and hatchery stocks. Escapement of pink and chum salmon is tracked throughout the season by weekly aerial surveys of 209 index streams. Management to achieve hatchery corporate escapement goals is accomplished by opening and closing subdistricts near hatcheries. Subdistrict openings are also utilized to allow the fleet to target hatchery stocks when wild salmon escapement is weak.

Valdez Fisheries Development Association's (VFDA) Solomon Gulch Hatchery has a stock of pink salmon that peaks in early July and a run of coho salmon that begins in August. All of VFDA's enhanced production returns to Solomon Gulch Hatchery in Port Valdez, except for a small run of coho salmon that returns to Boulder Bay near the Village of Tatitlek.

PWSAC pink salmon returns to Cannery Creek, Wally Noerenberg, and A. F. Koernig (AFK) Hatcheries peak in mid-August. A moderate run of coho salmon at Wally Noerenberg Hatchery is incidental to the late pink salmon fishery. The outlook for the general purse seine fishery in 2000 was for a total return of 31.3 million pink salmon composed of 24.7 million hatchery and 6.6 million wild stock pink salmon (54% PWSAC, 25% VFDA, 21% wild) (Appendix A.9). Forecasted common property fishery harvest was 18.2 million pinks, with an additional 10.3 million slated for corporate escapement and 1.4 million needed for wild stock escapement. Wild stock chum salmon total return was forecasted to be 800,000 fish with an escapement goal of 230,000. The forecast for enhanced chum salmon in seine districts was 640,000 fish returning to a remote release site in Montague District and 60,000 fish returning to AFK Hatchery.

When the Prince William Sound Salmon Harvest Task Force met prior to the fishing season, seine representatives on the task force reviewed changes to the fishery being considered for the 2000 season and made recommendations on management strategies to incorporate these anticipated changes. Strong statewide return forecasts, poor market conditions, catch limits, and low prices caused a great deal of concern over the potential for a successful seine season. There was significant concern preseason that above average returns of pink salmon could exceed processor's interest in purchasing PWS pink salmon. Seine effort in recent seasons has been greatly reduced because of low prices. Salmon Harvest Task Force members believed remaining seiners would likely concentrate their fishing effort on hatchery returns, where high volume harvests could occur. With a strong wild stock pink salmon forecast and a reduced seine fleet, the department agreed to open a majority of the Eastern District during seine periods targeting the pink return to Solomon Gulch Hatchery. This would help to relieve congestion in the Valdez Narrows Subdistrict where a majority of the VFDA return has traditionally been harvested. The department also agreed to fish earlier in the Southwestern District if the early wild stock returns indicated a strong wild stock run.

VFDA's 2000 Annual Management Plan for Solomon Gulch Hatchery called for their pink salmon return to be managed to meet a $2.66 million revenue goal. Fish determined to be surplus to the association's needs were made available for common property harvesting. In 2000, two processors had contracts to purchase VFDA's cost recovery salmon. Cost recovery fishermen had contracts that required them to fish only on days when there was no common property fishery. Two processors operating at full capacity in 2000 would have improved VFDA's prospects for efficiently achieving the cost recovery goal and allowed for more timely common property openings targeting surplus enhanced fish. However, without having the ability to cost recover fish every day because of catcher boat contracts, it was determined the best management strategy was to allow VFDA to reach approximately 33% of their revenue goal prior to the start of a common property fishery. This strategy accomplished three goals. It allowed VFDA to reach their revenue goal in a timely fashion; it allowed the department to assess the strength of the hatchery run; and it allowed early-run wild stocks to escape into their natal streams.

According to PWSAC's annual management plans, the corporate escapement goal for pink salmon was based on broodstock needs of approximately 800,000 fish and a revenue goal of $3.4 million. The department collectively managed pink salmon returns to Wally Noerenberg, Cannery Creek and AFK Hatcheries to achieve the goal. Fish estimated to be surplus to corporate needs were made available for common property harvest. PWSAC's contract seiners were required to fish every day that fish were available for harvest, so no attempt was made to complete a large percentage of cost recovery before allowing a common property fishery to occur.

2000 Chum Salmon Season Summary, All Seine Districts

Wild and enhanced chum salmon returns to PWS were strong and the areawide chum salmon harvest set a record in 2000 (Appendix E.9). Purse seiners were able to target wild chum salmon in the Eastern and Southeastern Districts and enhanced chum salmon returns in Montague and Southwestern Districts. The Port Chalmers remote release site in Montague District had a harvest of slightly less than 1 million chum salmon, which was 1.5 times the forecasted level. Fishing started June 1 with a four-day period ending June 4 (Appendices E.1, E.15). A seven-day per week fishing schedule was initiated on June 5. Fishing was allowed from 8:00 a.m. on Mondays until 8:00 p.m. on Sundays. This schedule was maintained through July 16. One additional 12-hour fishing period occurred on July 21 to harvest a small build up of surplus enhanced chum salmon at Port Chalmers, as wild stock pink salmon had not yet arrived.

This was the third year that chum salmon returned to the AFK Hatchery from two years of stocking aimed at establishing a chum salmon return to that facility. At the time of stocking, PWSAC hoped to be able to cost recover most of the adults and take eggs for their Port Chalmers remote release. After two years of stocking, the program was abandoned, but the adults still remain to return. This year was expected to be the largest harvest from this chum salmon stocking project, as the two major year classes of adults would be returning. PWSAC indicated that they would not need to cost recover these salmon as sufficient fish would be available at Wally Noerenberg Hatchery. A four-day common property fishing period was announced inside the AFK Hatchery Special Harvest Area on June 1, which was concurrent with Montague District opening. A seven-day a week fishing schedule was initiated on June 5 inside AFK Hatchery Special Harvest Area. This schedule was concurrent with open periods for Port Chalmers Subdistrict within the Montague District and was designed to harvest enhanced chum salmon returning to AFK Hatchery. Just over 400,000 chum salmon were harvested at that location, which was almost seven times the preseason forecast. Commercial fishing was restricted to the area inside the Special Harvest Area prior to July 18 in order to stay within the confines of the Southwestern District Management Plan.

The Board of Fisheries (BOF) approved change in the Wally Noerenberg Hatchery Management Plan that allowed purse seine vessels to harvest enhanced chum salmon in Esther Subdistrict for the purpose of preventing deterioration of fish quality of chum salmon not being adequately harvested by the drift gillnet fleet was not utilized this season. The gillnet effort was increased because of reduced fishing time in Copper River District, stronger prices, and because PWSAC took their entire non-pink salmon cost recovery goal from these chum salmon.

Overall, wild stock chum salmon escapement exceeded the midpoint escapement goals in the Eastern, Southwestern, Montague, and Southeastern Districts. Northern, Coghill, and Northwestern Districts did not meet their minimum threshold goal. Eshamy and Unakwik Districts do not have a chum salmon escapement goal as no streams in those districts support a spawning population of chum salmon. It is estimated that over 350,000 wild stock chum salmon were harvested with the majority of the harvest coming from the Eastern and Southeastern Districts. Chum salmon harvests in the first two open periods in Sheep Bay in Eastern District were greater than anticipated as nearly all of the early arriving fish backed out of the closed water sanctuary on the low tide cycle. As a result, enlarged closed waters were used extensively at that location for most of July to protect newly arriving chum salmon. Chum salmon returns to Beartrap Bay were not adequately harvested using normal closed water protection. After two weekly aerial surveys indicated that escapement of chum salmon into that bay was above the number needed for the entire season, a special seven hour open period was allowed, with the markers suspended, to harvest the chum salmon surplus. After that harvest, the bay was closed to allow pink salmon to enter the system.

On a sound wide basis, chum salmon escapement was 160% over the goal (Appendices E.4 and E.9 - E.12). Escapement for 2000 replaced the 1999 escapement as the third highest escapement since 1965, continuing a trend of increasing escapements since 1995. It is possible that the chum salmon escapement in 2000 was

greater in Coghill and Northwestern Districts, but because of poor weather, aerial surveys were not completed during the time of peak escapement. Age and sex composition of the 2000 chum salmon harvest is presented in Appendix E.14. Sockeye salmon escapement counts are made in conjunction with regular chum and pink salmon aerial surveys of selected systems (Appendix E.13).

2000 Pink Salmon Season Summary, All Seine Districts

The pink salmon return of 41.45 million to Prince William Sound was 1.32 times larger than the 31.3 million fish forecast and resulted in the third highest single season harvest of 38.9 million fish. This high harvest follows the 1999 harvest, which was the highest single season harvest in history, when 45.0 million pink salmon were caught. (Appendix E.2, E.3). Returning adults in 2000 weighed an average of approximately 3.42 pounds. Based on otolith recoveries, an estimated 5.7 million wild stock pink salmon contributed to the commercial common property and cost recovery fisheries. Approximately 99% of the wild stock harvest occurred in the commercial common property fishery. The ratio of enhanced pink salmon to wild pink salmon in the 2000 total commercial common property harvest was estimated to be 3.88:1. An estimated 1.66 million pink salmon escaped into Prince William Sound index streams to spawn, which ranks as the 10th highest escapement since 1960 (Appendices E.4 – E.8). Only Northern, Eshamy and Northwestern Districts failed to meet their minimum escapement goals. Approximately 49% (131 permit holders) of the Area E salmon purse seine permit holders made at least one delivery during the 2000 season.

Aerial surveys to assess early chum and pink salmon escapements in Eastern and Northern Districts began in late-June. In July, surveys began in all other seine districts. Similar to previous seasons, most fishing effort was directed at the migration corridors used by hatchery fish. Open areas in the Eastern and Southeastern Districts outside these migration corridors were fished heavily during the lull between the early and late hatchery runs. Arrival of the PWSAC hatchery return was about one week later than normal, which increased the harvest pressure on the eastern side of Prince William Sound. Wild stock returns to the Eastern and Southeastern Districts were strong and were able to support substantial fishing effort throughout the early and middle portions of the pink salmon return. Once the late run hatchery stocks started to arrive, effort in these districts was reduced and fishing then occurred in the more productive hatchery corridors. Processor-imposed limits on the number of pounds of salmon each fisherman could deliver only went into effect for one or two periods in mid-July. The primary reason some processors imposed limits was to allow processing of Bristol Bay sockeye salmon which arrived in PWS during the peak of the Solomon Gulch Hatchery pink salmon return. Peak seining effort occurred on August 5 when 124 permit holders delivered fish. Southeastern District's pink salmon escapement index was 7% above the upper end of the escapement goal range. Eastern District escapement was 6% above the upper end of the escapement goal range. Coghill District escapement was 41% above the upper end of its escapement goal range. Montague District escapement was 296% above the upper end of its escapement goal range. Southwestern District escapement was barely within the escapement goal range, surpassing the lower threshold by only 1%. In Northern and Unakwik Districts, escapement was 13% below the escapement range minimum threshold. Eshamy District escapement was 39% below threshold and Northwestern District escapement was 46% below its threshold. However, aerial surveys were not conducted in Northwestern District and the western parts of Coghill District for a 30-day period during the time of peak escapement because of bad weather. Therefore, pink salmon escapements in those areas were higher than indicated by the aerial survey model. The total pink salmon escapement index count of 1.66 million fish was 6% above the escapement range for even year pink salmon.

Common property seine openings took place in every district. Most of the seine harvest took place in those districts with high concentrations of enhanced fish. The late arrival of the PWSAC hatchery return put increased pressure on wild stocks. Fishing periods were allowed if aerial survey information indicated a surplus would be available. In general, pink salmon fishing periods occurred every four to five days during

the last two weeks in July. The state vessel, *R/V Montague,* arrived in Southwestern District on July 24 and started collecting pink salmon otoliths July 25. Otolith information was used to determine the percentage of hatchery fish contributing to the pink salmon run in Southwestern District. Commercial fishing for pink salmon in Southwestern District began on July 27 as a test to judge the pink salmon run strength. The *R/V Montague* continued to sample otoliths from pink salmon entering Southwestern District until August 7 at which time the majority of the fish sampled were of hatchery origin. Using *R/V Montague* for sampling the stock composition and using the common property fleet to occasionally test abundance has worked well in judging timing and strength of wild and hatchery stock returns in western PWS.

Eastern District

VFDA began harvesting their corporate escapement on June 20 at Solomon Gulch Hatchery using nine seine boats. VFDA's 2000 pink salmon revenue goal was $2.66 million. Based upon their sales contract with Peter Pan Seafoods and Bear & Wolf Seafoods, VFDA needed to harvest approximately 13.5 million pounds of pink salmon to meet their revenue goal. Initial harvests were tracking the anticipated run entry curve for an 11 million pink salmon return, and the average weight of pink salmon being harvested was approximately 3.3 pounds. VFDA attained 33% of their revenue goal on July 3. The percentage of female pinks in the sales harvest at that time was roughly 24%, indicating that the return was running about on time, but was larger than forecast. A wild stock pink and chum salmon harvest occurred on June 30 in the Eastern District excluding Port Valdez and Valdez Arm. A total of 190,602 pink and 7,562 chum salmon were harvested in this 12-hour period. Even though the Valdez portions of the district remained closed, approximately 99% of the pink salmon harvest came from hatchery production. The first commercial common property fishery targeting the VFDA pink salmon return occurred on July 4. A total of 1.49 million pink salmon were harvested in a 12-hour period with nearly all the effort targeting the hatchery return.

VFDA resumed corporate sales harvesting on July 5, stopping on days when commercial common property fishing periods occurred. The third 12-hour opening on July 6 resulted in a harvest of 950,786 pink salmon by 69 permit holders. Otolith samples indicated that 98% of the catch was hatchery produced. The next common property open period was on July 9, after which common property seine openings were for 12 hours every other day through July 17. The common property fleet began to target hatchery as well as wild stocks during the July 17 opening, as seen from the dispersion of the fleet throughout the district and the otolith recoveries, which indicated that 71% of the harvest was from wild stocks. Based on aerial escapement data, a three-day closure occurred at that time to allow wild stock escapement to catch up with the desired escapement for that date. On July 21, a 12-hour fishing period was aimed at harvesting hatchery pink salmon surplus to corporate needs. Salmon Harvest Task Force markers were used in many bays to provide a larger sanctuary area to protect arriving wild stock pink salmon. A total of 238,000 pink salmon were harvested during this period. Otolith recoveries indicated that 51% of the harvest was of wild stock origin. A four-day closure then took place as the most recent aerial survey indicated that Eastern District pink salmon escapement was 41% below the anticipated level for that date. On July 26, a 36-hour fishing period started, but only the first 12 hours allowed commercial fishing to occur outside of Port Valdez. Again, Salmon Harvest Task Force markers were used in many bays to protect wild stock pink salmon. Surplus hatchery pink salmon were available inside of Port Valdez, as VFDA had completed their cost recovery operation the previous day. A total of 332,645 pink salmon were harvested in the 36-hour period with 52% of the harvest being of wild stock origin. Fishing effort was spread throughout the district. Poor weather conditions prevented aerial surveys that week, but it was anticipated that escapement levels were still low. The next two fishing periods were both 36 hours long and occurred back-to-back and only waters inside of Port Valdez were opened to harvest surplus hatchery pink salmon. An aerial survey of the Eastern District on July 31 indicated that the escapement was still lagging, but the district had shown improvement since the last survey.

A 12-hour fishing period occurred on August 1 without the use of Salmon Harvest Task Force markers as the recent rains had attracted many pink salmon into the regular closed water areas. Port Valdez was not opened as the surplus hatchery pink salmon had been harvested and management of Port Valdez for the remainder of the year was to be for hatchery coho salmon. The closed water area in Beartrap Bay was suspended for part of this open period to harvest surplus wild chum salmon that had accumulated inside the bay during the recent extended closed water periods. Approximately 57,000 chum and 327,000 pink salmon were harvested with 96% of the pink salmon harvest coming from wild stocks. A three-day closure followed with the next fishing period occurring on August 5 in the entire district except for waters of Port Valdez. Again, Salmon Harvest Task Force markers were used in many bays to protect the later timed wild stocks. By this time, much of the fleet effort had shifted away from this district to other areas in PWS, but sufficient gear remained to have significant harvests. The harvest for this period was 311,337 pink salmon. Another fishing period occurred on August 7 using Salmon Harvest Task Force markers in most of the bays with a harvest of 148,370 pink salmon with over 90% being of wild stock origin. Aerial surveys at this time indicated that stream escapements were improving and good numbers of pink salmon were staging in the closed waters areas. The next fishing periods occurred on August 9, 12, 15 and 17 with extensive use of Salmon Harvest Task Force markers to protect needed wild stock escapements. An aerial survey conducted after the August 17 fishing period indicated that pink salmon escapement into Eastern District streams was approximately 20% below expected for that date. Pink salmon were still arriving, but at a slower rate as indicated by the August 17 catch of approximately 60,000 fish. Following the August 17 fishing period and subsequent aerial survey that indicated lower than desired escapement, the district remained closed until the management priority switched to coho salmon.

Southeastern District

Southeastern District commercial seine harvesting was managed so that open fishing periods were concurrent with open periods in the Eastern District. The ability to open large areas in PWS on the same day at the same time effectively spread the fleet out preventing potential overharvest of salmon in one district. If salmon escapement in other districts in PWS were close to anticipated numbers at the time, then they too were opened concurrently with the Eastern and Southeastern Districts to further disperse the gear.

Wild stock chum salmon escapements in Port Etches streams in Southeastern District were above the anticipated number from the very first aerial survey. When the second aerial survey occurred on July 12, the number of chum salmon counted in streams was again above the anticipated for that date with large numbers of additional chum salmon holding in nearby closed waters. The first fishing period occurred on July 15 in the waters around the western shores of Hinchinbrook Island. Over 33,800 chum salmon were harvested in that 12-hour period. Nearly all of the harvest occurred in Port Etches.

A second open period in the same area targeting chum salmon occurred on July 17 for 12 hours. Harvest for this period dropped to 1,782 chum salmon. On July 21, the entire Southeastern District opened for a general salmon fishery as both pink and chum salmon escapements were at or above expected levels for that time. Chum salmon harvest for this 12-hour period was 14,183 fish and the pink salmon harvest was 11,646 fish. The aerial survey conducted on July 24 indicated that pink salmon stream escapements were at or above the anticipated number for that date in nearly all Hawkins Island streams, but were starting to lag in Hinchinbrook Island streams. The next open fishing period was on July 26 for 12 hours, but only Hawkins Island was opened to allow the pink salmon escapements to improve on Hinchinbrook Island. The harvest of pink salmon jumped to over 45,000 fish and over 5,600 chum salmon.

Weather prevented an aerial survey to be flown the next week, but the large harvest and improved escapements from the last aerial survey justified another fishing period on August 1. Harvest for this fishing period was over 60,000 pink and 6,000 chum salmon. The district was opened for another 12-hour period on

August 5 concurrently with Eastern District. Poor weather had prevented aerial surveys, but it was anticipated that the increased stream runoff had attracted many fish inside closed waters near the stream mouths. The harvest for this period was almost 83,000 pink and 2,700 chum salmon. The increased harvest indicated that good run entry was taking place and another 12-hour open period was scheduled for August 7. This period produced the peak catch of the season for this district. Harvest for the August 7 fishing period was 94,743 pink and 355 chum salmon. An aerial survey on August 8 indicated that stream escapement numbers were 8% above the expected for that date in this district. Another 12-hour fishing period occurred on August 9 in which nearly 82,000 pink and 3,000 chum salmon were harvested. The large harvest indicated that the pink salmon return was still very strong in this district even though the amount of gear fishing in the district was reduced as effort had shifted to other districts.

The next fishing period occurred on August 12 for 12 hours. The harvest was composed almost entirely of pink salmon and was slightly over 93,000 fish. On August 15, this district and the Eastern District were the only two districts opened for commercial fishing. Opening only Hawkins Island was justified since an increase in effort in this district was anticipated for this period and stream escapements of pink salmon on Hinchinbrook Island were again lagging behind expected numbers. Eleven boats fished the district during this period and harvested 65,243 pink salmon. August 17 was the last open period for this district. Effort had shifted to other districts again and only 2 boats fished catching just over 9,000 pink salmon. Stream escapements on Hinchinbrook Island were lagging although stream escapements on Hawkins Island were at, or above, expected numbers. An aerial survey on August 24 indicated that most streams on Hinchinbrook Island reached the expected pink salmon escapement numbers. Run entry into Southeastern District streams was nearly complete at that time and no further fishing time was allowed. The district closed for the season on September 17.

Southwestern District

The initial pink salmon opening in Southwestern District occurred on Wednesday, July 26, which coincided with the openings in four other districts. *R/V Montague* started recovering otoliths from pink salmon entering Southwestern District on July 25. These samples indicated that 56% of fish entering PWS through the district were wild stock origin. Since one vessel could not indicate the volume of fish entering the district, a common property fishery was allowed. Point Elrington and San Juan Subdistricts, the east side of Knight Island and the AFK Hatchery Terminal and Special Harvest Areas were opened. Twenty seine boats fished in the Southwestern District on the first opening, harvesting approximately 81,500 pink salmon. Otolith recoveries indicated that 65% of the fish caught were wild stock, 15% were VFDA hatchery fish and 20% were PWSAC hatchery fish. Most of the fleet remained in the Eastern and Southeastern Districts fishing VFDA enhanced stocks and wild stocks. The moderate amount of effort and the relatively high number of wild stock pink salmon in the harvest dictated that fishing time and area were restricted to allow the wild stocks to pass through the district to their final destination. The next open fishing period was on July 28 for 36 hours, but only inside the AFK Hatchery Terminal and Special Harvest Areas. Harvest totaled just over 13,000 pink salmon.

On August 1, Port San Juan and Point Elrington Subdistricts opened for a 12-hour fishing period. Approximately 144,600 pink salmon were harvested in this period. Otolith samples taken from this harvest indicated that 54% of the harvest was wild stock with the remaining 46% coming from PWSAC hatcheries. Aerial surveys of the district streams indicated that the district was 72% below the expected escapement. Otolith samples taken by the *R/V Montague* also indicated that pink salmon entering PWS were composed of approximately 50% wild stocks. The district did not open again until August 5. Otolith samples taken by the *R/V Montague* indicated that the hatchery component of pink salmon entering PWS was slowly rising and PWSAC's cost recovery operation at AFK Hatchery was slowly improving. During a 12-hour fishing period on August 5, 34 fishing vessels harvested approximately 458,400 pink salmon. Otolith samples

indicated that 56% of the harvest was hatchery produced pink salmon. Aerial surveys indicated that pink salmon escapement into the district streams was about 50% of the expected number. Otolith samples taken by the *R/V Montague* the following day indicated that the hatchery contribution to pink salmon entering PWS through this district had risen above 60%. The percentage of females in the cost recovery fish at AFK Hatchery was extremely low for this date, indicating that the return was about one week later than normal. A 12-hour fishing period occurred on August 7 in the Port San Juan and Point Elrington Subdistricts, on the east side of Knight Island and around Latouche Island to assess the trend of run entry into PWS. The number of vessels fishing the district jumped to 57, and approximately 684,300 pink salmon were caught during this period. Otolith samples from the Knight Island area indicated that 69% of the catch was hatchery produced while samples from the Latouche Island area indicated that 78% of the catch was hatchery produced, the largest contributor being AFK Hatchery. The two subdistricts had catches that were 63% hatchery produced. The increasing percentage of hatchery fish in the catch and the low female percentages in the hatchery cost recovery harvest indicated that the hatchery return was late and the major portion of the run was still to come. The *R/V Montague* returned to Cordova on August 8, so run entry information could available only from the commercial fleet. Stream escapements in the district were still 50% below the expected number. It was anticipated that if wild stocks were late in their arrival, as the hatchery stocks appeared to be, then escapement numbers would soon begin to catch up.

The next 12-hour fishing period occurred on August 9 when approximately 625,200 pink salmon were harvested. Latouche Island and Port San Juan Subdistrict were not opened during this period to allow more fish to enter the AFK Hatchery Special Harvest Area for cost recovery. Otolith samples from this fishery indicated that 70% of the harvest was hatchery produced pink salmon. The next 12-hour fishing period occurred on August 12. A harvest of 434,691 pink salmon occurred with 77% of the catch coming from hatchery production. Latouche Island and Port San Juan Subdistrict were not opened during this period to allow additional wild stock escapement and more pink salmon to enter the AFK Hatchery Special Harvest Area for cost recovery. An aerial survey of this district on August 14 showed some minor improvements in stream escapements, but overall escapement was still 42% below expected. Cost recovery harvest at PWSAC hatcheries was 20% behind the expected harvest for that date and was at 50% of their revenue goal. A four-day closure occurred to allow for improvement of wild stock escapement and PWSAC cost recovery. The next 12-hour fishing period occurred on August 17 in Point Elrington Subdistrict and on the east side of Knight Island. Approximately 610,800 pink salmon were harvested with about 77% of the catch coming from hatchery production. PWSAC indicated that run entry had increased rapidly during the previous two days and they were at 94% of their revenue goal.

A large build up of pink salmon was starting to occur in areas north of the hatchery and there was concern that these fish would hold in this area and affect the quality of the harvest during later periods. A 12-hour fishing period occurred on August 19 in the southern portion of the district except San Juan Subdistrict and the AFK Hatchery Terminal and Special Harvest Areas. Peak harvest for the district occurred during this period when 1,069,536 pink salmon were harvested. Hatchery stocks contributed approximately 83% of the pink salmon in this harvest. The large number of fish harvested and the current female percentage in the hatchery areas for this date indicated that run entry for hatchery pink salmon was at its peak. Another 12-hour fishing period occurred on August 21 in the same area as the previous period. A harvest of 830,230 pink salmon occurred with 84% of the harvest coming from hatchery-produced pink salmon. An aerial survey of this district on August 21 indicated continued improvement in wild stock escapement, but still 20% below the expected number. However, bay and mouth survey counts indicated that additional fish would soon be entering district streams.

The next period was on August 23 for 12 hours in the same area. Over 1,006,000 pink salmon were harvested with 82% coming from hatchery production. PWSAC was nearing completion of their cost recovery operation and a larger interception of pink salmon bound for the hatchery terminal area was needed. Starting on August 25, a 12-hour fishing period occurred in Point Elrington Subdistrict and a 36-

hour period occurred in Port San Juan Subdistrict to target returning hatchery stocks. Other portions of the district remained closed to provide some additional protection for wild stock escapement still needed in the district. Over 965,200 pink salmon were harvested during this period with 88% of the catch coming from hatchery production. PWSAC finished their cost recovery of pink salmon during this time. Another 12-hour fishing period occurred on August 27 in Point Elrington Subdistrict and a 36-hour fishing period was allowed in Port San Juan Subdistrict including waters of the AFK Hatchery Terminal and Special Harvest Areas. A harvest of 858,222 pink salmon took place with 85% of the catch coming from hatchery production.

An aerial survey of the district on August 28 indicated that stream escapements were much improved with the district being only 4% below the expected escapement. A fishing period of the same time and area, allowed on August 29, resulted in a harvest of approximately 664,000 pink salmon, of which 95% were hatchery fish. During this period PWSAC requested that additional protection be provided in the AFK Hatchery Special Harvest Area for hatchery broodstock. The next period on August 31 was for the same length of time and area, except that the AFK Hatchery Special Harvest Area remained closed. Approximately 310,600 pink salmon were harvested.

Starting September 2, a series of three 4-day fishing periods occurred in Port San Juan Subdistrict and the AFK Hatchery Terminal Harvest Area. The first period resulted in a harvest of 354,740 pink salmon; the second period started September 6 and resulted in a harvest of 25,127 pink salmon; the third period started September 10, but no harvest was reported. A three-day fishing period, open only inside the AFK Hatchery Terminal Harvest Area, started on September 14 but no harvest was reported. On September 17, an eight-day fishing period was allowed inside the AFK Hatchery Terminal and Special Harvest Areas to harvest any remaining pink salmon as the hatchery egg take was complete. A harvest of 161,586 pink salmon occurred on fish that were surplus to hatchery broodstock needs. A final seven-day fishing period started on September 25 and no harvest was reported. These last two harvest periods were primarily for roe recovery with carcasses being used for fish meal production. The district closed to commercial salmon fishing on October 1.

Northern District

Northern District open periods were always concurrent with other districts in order to disperse commercial fishing effort. The first open period was on July 26 for 12 hours. Perry Island Subdistrict did not open. By regulation, it can only open if Esther Subdistrict is open when managing for PWSAC cost recovery. Nine purse seine boats harvested salmon throughout the district during the first period. An estimated 33,400 pink and 2,400 chum salmon were harvested. Otolith samples indicated that 73% of the harvest was from wild stocks. An aerial survey conducted on July 24 indicated that wild stock pink salmon escapements were 75% below expected. Most of the shortfall in stream escapements was in the eastern portion of the district. The next aerial survey, on July 31, indicated that wild stock escapements were 54% below expected and again most of the shortfall was in the eastern portion of the district. PWSAC had not started any cost recovery at Cannery Creek Hatchery.

On August 1, only the central portions of the district were opened for 12 hours to intercept hatchery bound pink salmon and protect wild stocks located in the eastern portion of the district. Approximately 175,400 pink and 5,600 chum salmon were harvested. Otolith samples indicated that 65% of the pink salmon harvest was hatchery produced. The next 12-hour fishing period occurred on August 5 with only the central portion of the district opened in order to confine the fleet to harvesting pink salmon bound for Cannery Creek Hatchery. PWSAC started their cost recovery operation at this time so the Cannery Creek Hatchery Terminal and Special Harvest Areas remained closed. A total of 30 boats fished in this district during this period and harvested approximately 367,700 pink salmon. An aerial survey of district streams on August 6

indicated that escapements were 50% below expected. Escapements were lagging in all portions of the district. The female percentage was less than expected in the Cannery Creek Hatchery cost recovery catch, indicating the run was slightly late. The next fishery occurred on August 7 only in waters of Unakwik Inlet, Wells Bay, and around Naked Island. Salmon Harvest Task Force markers were used in all locations that were open to provide additional protection for wild stock pink salmon. Sixteen boats harvested approximately 155,800 pink salmon during this 12-hour opening. Otolith samples indicated that approximately 86% of the pink salmon harvest was hatchery produced.

The next 12-hour fishing period occurred on August 9. PWSAC was falling behind in their cost recovery at all their hatcheries. To compensate for the lack of cost recovery fish, Unakwik Inlet was not opened during this fishery to allow additional pink salmon to enter the hatchery Special Harvest Area. Only a narrow portion of the district was opened that would allow some interception of hatchery stocks without putting excess pressure on wild stocks. Over 265,000 pink salmon were harvested in this period with 92% of the harvest coming from hatchery production. Another 12-hour fishing period occurred on August 12 using the same boundaries. Thirty-six boats harvested approximately 354,600 pink salmon. Harvest by the cost recovery fishing vessels was increasing at Cannery Creek Hatchery and the female percentage was only slightly below the expected percentage. It was thought that this hatchery return would be smaller than forecast based on the total harvest and the female percentage in the cost recovery harvest. The district was closed for four days to allow additional cost recovery harvesting and wild stock escapement to occur. An aerial survey on August 16 indicated that district streams were 47% below expected escapement levels. Some improvement was occurring in fish numbers in bays and stream mouths in the western part of the district, but little improvement was seen in the eastern portion of the district. The 12-hour fishing period on August 17 occurred only in a narrow portion of the district near Unakwik Inlet. Sixty-seven boats harvested approximately 554,700 pink salmon. Otolith samples indicated that 96% of the harvest was hatchery produced. On August 18, PWSAC indicated that run entry into their hatcheries had improved during the previous few days and they were at 94% of their revenue goal. Unakwik Inlet except for the hatchery Terminal and Special Harvest Areas opened on August 19. Also the western side of Perry Island Subdistrict was opened since Esther Subdistrict would also be opening during this period. Those parts of the district where high percentages of wild stock pink salmon could be intercepted remained closed. Peak harvest for the season occurred during this period when over 785,600 pink salmon were caught. Otolith samples indicated that 97% of the harvest was hatchery produced.

Starting August 21, a series of three 12-hour periods, every other day, targeted the hatchery return. The pink salmon harvest was 455,626 fish during the first period, 327,074 fish during the second period, and 129,000 fish during the third period. The open area around Cannery Creek Hatchery was reduced during the second period as a portion of the broodstock held behind a net enclosure at the hatchery had escaped. A buffer area closed to commercial salmon fishing continued to be used for the remainder of the season until the hatchery completed their egg take. By then, PWSAC had achieved their revenue goal for pink salmon. Starting on August 27, three consecutive 36-hour commercial fishing periods were allowed with a 12-hour closure between each period. The first period resulted in a harvest of 132,584 pink salmon, the second period ended with 34,479 pink salmon harvested and the third period resulted in only 15,190 pink salmon harvested. Open fishing periods continued starting on September 2, but no harvest was reported until the Cannery Creek Hatchery Special Harvest Area was opened to harvest pink salmon remaining after the hatchery egg take was complete. From September 14 through September 24, 286,909 pink salmon were harvested mostly for their roe with the dark fish carcasses being used as a fish meal product. The district closed for the season on October 1.

Montague District

All of the pink salmon harvest in Montague District occurred in late June and early July in Port Chalmers Subdistrict incidental to the directed harvest of hatchery enhanced chum salmon. A total of 87,634 pink salmon were harvested from this district for the season. The peak catch of 82,589 pink salmon occurred during the week of June 26 to July 2. Otolith samples taken from pink salmon caught during this period indicated that all of the harvest was from Solomon Gulch Hatchery production. The next period from July 3 to July 9 saw the second highest pink salmon harvest for the season with 3,265 fish caught. The last reported harvest of pink salmon in this district occurred on July 21 when 1,063 fish were caught. It was not until an aerial survey on August 14 that wild stock escapement in this district was sufficient to allow a commercial fishery. Commercial fishing periods occurred on August 23 and August 25, each for 12 hours. No reported harvest occurred during either of these fishing periods as harvesters targeted returns closer to PWSAC hatcheries.. This district was closed for the season on September 17.

Coghill District

Coghill District became a dual gear area on July 21, allowing purse seiners access to enhanced pink salmon returning to Wally Noerenberg Hatchery and wild pink salmon returning to district streams. This season's sockeye salmon return to Coghill River was strong and commercial gillnet fishing was allowed to harvest excess sockeye salmon throughout the return. The midpoint of the escapement goal range for sockeye salmon for Coghill Lake was met on July 23. Some additional sockeye salmon were allowed into the lake for PWSAC to conduct a remote egg take for Main Bay Hatchery. Aerial survey information did not indicate a strong pink salmon return in July, as happened in 1999. It was not until an aerial survey on August 16 that the expected numbers of pink salmon were observed in the Coghill River, while most of the systems on the west side of Port Wells were still below their expected escapement levels. PWSAC was conducting the majority of their cost recovery at Wally Noerenberg Hatchery since pink salmon returns to the other hatcheries appeared to be less than forecasted. As a result, after the last gillnet only opening in Coghill District on July 20 and 21 the district did not reopen to commercial common property fishing until August 19. All commercial purse seine fishing periods in this district were concurrent with purse seine openings in other areas in PWS.

Beginning on August 19, the common property commercial seine fleet was allowed a 12-hour fishing period in the entire district except that Salmon Harvest Task Force markers were used in all bays on the west side of Port Wells. PWSAC was nearing completion of cost recovery harvest and determined that sufficient fish were available in the hatchery Terminal and Special Harvest Areas for their needs. Over 526,900 pink salmon were harvested during this fishing period. Otolith samples indicated that 86% of the pink salmon harvest came from hatchery production. A second 12-hour open period was allowed in the district on August 21, which included the Wally Noerenberg Hatchery Terminal Harvest Area. Over 522,100 pink salmon were harvested in this period with 87% of the fish coming from hatchery production. Starting on August 23, five consecutive 36-hour fishing periods occurred with a 12-hour closure between each period. An aerial survey on August 23 was not completed because of strong winds, but that portion of Coghill District that was surveyed indicated that the west side of Port Wells was still below expected escapement levels while the Coghill River had a large surplus of escapement. As a result, all of the open periods utilized Salmon Harvest Task Force markers, which provided a large closure around streams on the west side of Port Wells. PWSAC had also completed their cost recovery at Wally Noerenberg Hatchery on August 22, so the first 36-hour period included the hatchery Terminal and Special Harvest Areas. Peak harvest for this district occurred on the first of these 36-hour openings with 1,023,115 pink salmon caught. Otolith samples indicated that 93% of the pink salmon harvest was hatchery produced. During the third 36-hour period many of the tagged hatchery brood fish were found mixed with the commercial catch. In order to protect hatchery broodstock, a larger closure area inside the Special Harvest Area was instituted for the next open

period, which started August 29. Since no landings were being reported from outside of the hatchery area, only Esther Subdistrict was opened beginning with the August 29 period. Port Wells remained closed to give additional protection to wild stocks on the west side of the bay and to arriving coho salmon. On August 31, the last of the 36-hour periods occurred, but because PWSAC was concerned that they had lost too many of their broodstock from earlier fishing periods, the hatchery Special Harvest Area remained closed.

Starting September 2, a four-day commercial fishing period occurred in Esther Subdistrict, except for the hatchery Special Harvest Area. During this period the catch was 118,061 pink salmon and 13,017 coho salmon. At this time, pink salmon catch was decreasing and coho salmon catch was increasing. Another four-day opening occurred starting on September 6. In this period approximately 13,500 pink salmon and 10,172 coho salmon were caught. The last purse seine opening started on September 11 for 36 hours. By regulation, purse seine gear is legal gear in Coghill District while the harvestable surplus is predominately pink salmon by number. The harvest in this 36-hour period was 9,502 coho and 497 pink salmon. All remaining open periods targeted coho salmon using gillnet gear.

Northwestern District

Only one fishing period occurred in Northwestern District in 2000. On July 26, a small portion of Port Nellie Juan was opened for 12 hours to harvest surplus pink salmon. An aerial survey on July 23 indicated that pink salmon escapement in the streams in Port Nellie Juan was above expected and a harvestable surplus was available. A 12-hour commercial fishing period occurred with a harvest of 17,223 pink salmon. The next aerial survey on July 31 indicated that the surplus had been harvested and that additional harvest would reduce the wild stock escapements in this portion of the district below desired levels. The district did not reopen during the season and closed to commercial salmon fishing for the year on September 17.

Unakwik District

Both purse seine and drift gillnet are allowed to be used in Unakwik District during any open period. The majority of open periods occur from the middle of June until the middle of July and target sockeye salmon returning to the district. Nearly 100% of fishing effort is by drift gillnet gear during this time with a harvest of 1,119 sockeye salmon. In mid-August schools of pink salmon were seen swimming out of the Northern District into Unakwik District. It was thought that these pink salmon were fish straying from Cannery Creek Hatchery. A 12-hour open period occurred in this district on August 19 in which 20,485 pink salmon were caught. Otolith samples indicated that 92% of this harvest was of hatchery origin confirming that most pink salmon in this district at this time originated from Cannery Creek Hatchery. A second 12-hour period occurred on August 21, but no harvest occurred. During this open period many Cannery Creek Hatchery broodstock had escaped from the net enclosure and a buffer area and were caught in the common property fishery. A buffer area was now needed to protect the remaining pink salmon for use as hatchery broodstock. As a result this district did not reopen during the rest of the season. The district closed for the season on September 17.

Coho Salmon, Eastern District

Beginning August 1, waters of Port Valdez were closed to protect coho salmon returning to Solomon Gulch Hatchery and to provide reasonable separation between sport and commercial harvesters targeting the enhanced coho return. Starting September 6, two consecutive 36-hour open fishing periods with a 12-hour closure between them occurred in Port Valdez. This opening date was intentionally chosen to occur after Labor Day in order to clean up remaining coho salmon near the hatchery after sport fishing effort had

diminished. These two open periods resulted in a harvest of 164,173 coho salmon. The purse seine fleet caught a total of 186,641 coho salmon in the Eastern District during 2000. Solomon Gulch Hatchery harvested nearly 24,900 coho salmon for cost recovery and used just over 1,100 for broodstock. Sport fish harvest of coho salmon was considered good by all accounts, but an actual number is not available although some estimates have ranged as high as 100,000 fish caught. Eastern District closed for the 2000 commercial fishing season on September 24 as no harvest had been reported since September 13 and all the processors had ceased buying coho salmon in Port Valdez.

Coho Salmon, Coghill District

The coho return to Wally Noerenberg Hatchery of 114,978 coho salmon was 87% above the forecast of 61,400 fish. The return in 2000 allowed a common property fishery to occur and sufficient broodstock were collected to meet the egg take goal. Recent hatchery remodeling resulted in a change to the coho salmon rearing program. Previously, coho salmon fingerlings were reared in a poor quality pond, now rearing occurs in a more efficient and sanitary raceway system. The total rearing capacity was reduced with the hope that larger, healthier smolt will have an improved survival resulting in nearly the same number or more returning adults. Small returns in the past two years did not allow for sufficient broodstock to be collected to meet the egg take goal for this species so smaller adult returns are expected in the next few years.

Conclusions and Recommendations

The department is currently working with fishing industry representatives to explore management options that can maximize utilization of the pink salmon resource while providing for corporate and wild stock escapement needs. After accounting for the wild stock escapement index, hatchery broodstock, and the commercial fishery, 2000's total return estimate for pink salmon is approximately 41.63 million fish. Few surplus hatchery produced pink salmon were remaining at the end of the season despite this being the third largest pink salmon harvest in PWS history. The potential for a large unused surplus of pink salmon still remains. The pink salmon return was late in its arrival with the peak common property catches occurring on August 19. In most years when pink salmon stocks around the state are high the processing capacity in PWS will begin to diminish by August 20. The common property fleet harvested approximately 10.0 million pink salmon after August 20. Nearly all of this harvest resulted from hatchery production. This late harvest clearly indicates that changes and improvements are needed within the PWS hatchery system to advance the run timing ahead to a more normal peak near August 12. This season it was not necessary to limit harvests to match processing capacity during the peak of the return. Some processors did some limiting in early July because of commitments to process Bristol Bay sockeye salmon, but those limits were only for one or two periods. Even with the large and late pink salmon harvest, processing capacity available in PWS and other areas of the state was able handle the daily volume. During years with large harvests statewide, pink salmon harvests in other regions clearly can have an influence on the conduct of the pink salmon fishery in PWS. The common property fleet harvested approximately 448,500 excess pink salmon in the Cannery Creek and AFK Hatchery Special Harvest Areas after the hatchery egg takes were complete. This amount of surplus pink salmon is considerably less than the number remaining in the water after last season. A market is developing for pink salmon carcasses processed into fish meal. By utilizing the carcass it becomes legal to extract the valuable roe. Some surplus will occur every year as estimating the number of fish available for hatchery broodstock is not precise. Ideally, this surplus would be less than 500,000 pink salmon for all hatcheries combined.

The department hopes to improve pink salmon utilization by broadening its ability to use otolith marks for improved forecasting and inseason management. With otoliths-marked fish, risks to wild stocks associated with a harvest decision can be evaluated prior to a fishery being announced. Post-fishery analysis can be

used to further refine management. Stream escapements, commercial harvests, and migration routes can all be accurately characterized using otolith marks. As a management tool, otolith marks offer a great deal of useful information about wild and hatchery pink salmon interactions. Appendix F.8 provides the sound-wide pink salmon contribution to the commercial catch based on otolith marks.

Reliably forecasting the magnitude of the PWS return can assist local managers, hatchery operators and the fishing industry in sufficiently preparing for the coming salmon season. Commercial harvest of 38.8 million pink salmon in 2000 exceeded the forecasted harvest by 10.3 million fish. Reliable statewide forecasts can help the entire industry identify and address if and where regional processing shortfalls are likely to occur. Traditional markets and outlets may be unwilling or unable to absorb consistent annual harvests of 100 million pink salmon from Alaska. This year the statewide harvest was less than 100 million pink salmon and most processors continued operation into September. The issue of harvesting later returning pink salmon will still need to be addressed locally and statewide when harvests return to higher levels. At that time, post season surpluses comprised of late timed pink salmon are likely to occur.

2000 PRINCE WILLIAM SOUND AND COPPER RIVER SUBSISTENCE FISHERIES

Subsistence and personal use harvests (Appendices G.1 – G.6) continue to be minor in comparison to the commercial salmon harvest in the Prince William Sound Management area. The largest subsistence fisheries occur on the upper Copper River, upstream of regulatory markers above Haley Creek to the Copper River's confluence with the Slana River. A major change occurred in this fishery for the 2000 season. At the 1999 Prince William Sound Board of Fisheries meeting, the BOF made a positive Customary and Traditional Use finding for salmon stocks in Chitina Subdistrict in the upper Copper River. This resulted in the Chitina Subdistrict personal use fishery changing to the Chitina Subdistrict subsistence fishery. As a result, there are currently two subsistence fisheries in Upper Copper River District, Glennallen Subdistrict and Chitina Subdistrict. Alaskans can participate in only one subsistence fishery in the Copper River drainage (Glennallen or Chitina Subdistrict).

In Prince William Sound and the Copper and Bering River Districts, commercial fishermen may withhold a portion of their commercial catch for home use. Since 1994, all chinook salmon in Copper and Bering River Districts that are harvested, but not sold, in the commercial fishery must be reported on a fish ticket.

Following 1999 action by the BOF, all waters of the Prince William Sound management area are closed to the personal use taking of finfish. Subsistence fishing permits are issued from the Cordova office for the Copper River Delta and designated waters of Prince William Sound.

PRINCE WILLIAM SOUND AND LOWER COPPER RIVER

Boundary lines for Copper River District subsistence fishing are the same as the commercial gillnet fishery. Subsistence fishing is only allowed during commercial gillnet periods. Within Copper River District, drift gill nets are the only legal gear and may have a maximum length of 50 fathoms with a maximum mesh size of 6 inches prior to July 15. In addition to the subsistence fishery, commercial fishermen may withhold a portion of their commercial catch for home use. However, any commercially caught chinook salmon not sold must be reported on a fish ticket.

In 2000, three subsistence permits were issued for Prince William Sound. All three permits were returned but none was fished. In Copper River District, 416 permits were issued in 2000, somewhat higher than the 294 permits issued during 1999. A harvest of 689 chinook salmon and 4,360 sockeye salmon was reported. A total of 107 of the 416 permit holders reported they did not fish. The increase in the number of lower Copper River subsistence permits issued in 2000 was primarily a result of the extended closure in June of commercial fishing in Copper River District. While the commercial harvest was suspended to improve escapement, a comparable schedule of subsistence openings was maintained to provide opportunities for subsistence users to harvest salmon. Many limited entry permit holders who normally would have taken home fish out of their commercial catch instead requested subsistence permits during the extended June closure.

Between 1994 and 1996, as many as five permits have been issued for the Batzulnetas subsistence fishery. In 1997, there were no permits issued. In 1998, one fishwheel permit was issued. In 1999, the U.S. District Court issued a preliminary injunction against the State of Alaska from enforcing 5AAC 01.647(i)(5) which established fishing periods through emergency order authority. The injunction allowed subsistence fishing 7 days per week from June 1 through September 1 or until 1,000 sockeye salmon were taken. No more than 250 sockeye salmon could be taken in any single week.

EASTERN AND SOUTHWESTERN DISTRICT SUBSISTENCE FISHERIES

Permitting for the Southwestern and Eastern subsistence areas began in 1988. Residents of both Chenega Bay and Tatitlek are eligible for subsistence use permits in their respective areas. In 1991, a court ruling qualified all residents of Alaska for a subsistence permit in the Eastern or Southwestern areas. Permit holders are allowed to fish in these areas from May 15 until two days before the first commercial fishing period. Once the commercial fishing season is established, subsistence fishing may occur only during commercial fishing periods. Two days after closure of the commercial fishery for the season, subsistence harvesting is open to seven day per week fishing until September 30 in the Southwestern area and until October 31 in the Eastern area.

In 2000, 12 permits were issued for the Eastern District and 3 permit holders reported fishing, harvesting a total of 140 sockeye, 468 coho, 40 pink, and 40 chum salmon. In the Southwestern District, 12 permits were issued and 6 permit holders reported catching 24 chinook, 39 sockeye, 229 coho, 211 pink and 143 chum salmon.

UPPER COPPER RIVER

GLENNALLEN SUBDISTRICT

Glennallen Subdistrict is that portion of the mainstem Copper River upstream of the Chitina-McCarthy Bridge to the mouth of the Slana River. This subdistrict is open June 1 through September 30 for continuous fishing. Fish wheels and dip nets are legal gear. During the 1996 Board of Fisheries meeting, the Copper River District Salmon Fishery Management Plan was modified and a range of 60,000 – 75,000 subsistence salmon was established to accommodate the variability in harvest levels and allow for increased harvests between board cycles. Participants are allowed one permit per household and the permit identifies the gear type to be used. Total annual harvest cannot exceed 500 salmon for a household of two or more and 200 salmon for a household of one. No more than 5 chinook salmon may be taken by each dip net permit holder. Caudal fins must be clipped from all salmon that are harvested. Subsistence permits with completed harvest information are required to be returned to the department by October 31 of each year.

Since 1996, an average of 753 fish wheel and 315 dip net permits were issued. Harvest and effort in this subdistrict has been increasing. The average number of dip net permits is up 72 percent over the previous five–year period while the average number of fish wheel permits has increased by 24%. An average of approximately 70,500 salmon has been taken during the last 5 years compared with approximately 53,700 during the previous 5 years. Sockeye salmon dominate the harvest followed with approximately 95% of the reported catch, followed by chinook and coho salmon.

The 2000 chinook harvest for the subdistrict was a record at 4,782, even though the total salmon catch of 64,885 was below average. From the permits received in the past, it appears approximately 25% of the chinook salmon subsistence harvest is landed by 2% of the permit holders, indicating that some individuals effectively target chinook salmon for subsistence uses.

CHITINA SUBDISTRICT

Chitina Subdistrict is that portion of the mainstem Copper River from a marker just above Haley Creek to the downstream edge of the Chitina-McCarthy Road Bridge. The Alaska Board of Fisheries changed this fishery from a personal use fishery to a subsistence fishery in 1999. The regulations for the Chitina

Subdistrict subsistence fishery remained similar to the Copper River Personal Use Salmon Dip Net Fishery regulations with three exceptions. The three exceptions included an adjustment to the annual bag limit, a maximum harvest level of wild stock sockeye salmon of 85,000 – 130,000, and permit holders are no longer required to possess a sport fishing license. Annual bag limits will continued to be 30 salmon for a household of two or more, and 15 salmon for a household of one, of which only one fish can be a chinook salmon. The Board of Fisheries determined that reducing the bag limit of chinook salmon from four in the personal use fishery to one in the subsistence fishery, provided for a reasonable opportunity to harvest a chinook salmon, but would also maintain chinook salmon harvests at historic levels. Based upon recent harvests the Board determined that 100,000 – 150,000 salmon were necessary for subsistence needs to be met for the Chitina Subdistrict fishery. This number included contributions of hatchery fish, and after this contribution was subtracted, resulted in the 85,000 – 130,000 wild stock harvest level.

5 AAC 01.647 COPPER RIVER SUBSISTENCE SALMON FISHERIES PLANS requires the fishery to be opened between June 1 and June 11 depending on the strength and timing of the sockeye run. In 2000, the dip net fishery was opened by emergency order on June 10 for a 12-hour fishing period. Fishing appeared to be slow during the first period, which was followed by an 80-hour period on June 15th and another 80-hour period on June 22. On June 28, the department announced that the fishery would remain open continuously through September 30, unless closed by emergency order. The fishery remained open for the remainder of the season as expected.

The reported harvest for the Chitina Subdistrict subsistence fishery in 2000 was 3,037 chinook, 103,329 sockeye, and 3,540 coho salmon. There were 8,151 dip net permits issued for the subdistrict in 2000 (Appendix G.5).

BATZULNETAS

In 1987, an interim subsistence fishery was provided for by emergency regulation at Batzulnetas to settle the United States District Court case of John vs. Alaska. The Batzulnetas fishery encompasses all waters from the regulatory markers near the mouth of Tanada Creek and approximately one-half mile downstream from that mouth and in Tanada Creek between ADF&G regulatory markers identifying the open waters of the creek. The fishery may begin after June 1. Fishing periods during the month of June are one 48-hour period per week. Beginning in July fishing periods are 84-hours per week until September 1 when the fishery closes.

In 1987, the fishery was conducted near the mouth of Tanada Creek near the historical village site of Batzulnetas. Eight permits were issued in that year to individuals or family groups from Mentasta and Dot Lake, and the fishery was conducted during July and early August. A total harvest of 22 sockeye salmon was reported in 1987. The Board of Fisheries reviewed the fishery before the 1988 season and set seasons, eliminated the quota, and provided for additional gear types. Permits can be issued throughout the season and must be completed and returned to Fish and Game by September 30. No permits were issued for this fishery between 1988 and 1992. However, in 1993, one permit was issued and the holder harvested 160 sockeye salmon. In 1994, five permits harvested 997 sockeye. In 1995 four permits were issued, and 16 sockeye were harvested. No permits were issued in 1996. In 1997, three permits were issued. One household reported fishing and having harvested 176 sockeye salmon. In 1998, one permit was issued and a harvest of 386 sockeye salmon was reported. In 1999, one permit was issued with a reported harvest of 55 sockeye salmon. One permit holder again harvested 55 sockeye salmon during 2000.

GULKANA HATCHERY

Gulkana Hatchery is located on the Gulkana River approximately six miles north of Paxson Lake. The hatchery was built in 1973 and was operated by the Department of Fish and Game. In 1992, the hatchery was transferred to PWSAC. The donor stock for the facility was the local wild stocks at the hatchery site on the Gulkana River. Gulkana Hatchery was expanded to two facilities in 1986. Gulkana I, the original facility, has grown from 225,000 egg capacity in 1973 to 35.5 million egg capacity in 1995, which generates an annual adult return of as many as 800,000 adults. Gulkana II, a smaller facility, has a permitted capacity of 2.5 million eggs.

The hatchery produces sockeye salmon for common property fisheries, which include commercial, subsistence, and sport fisheries. In addition to the common property harvest, hatchery returns meet broodstock needs and also create an additional surplus of sockeye salmon at the hatchery and the Crosswind Lake remote release site. Since the run timing of hatchery stocks coincides with that of wild stocks bound for the Copper River Delta, the harvest rate in the commercial fishery is determined by the strength of the wild stock escapement. Gulkana Hatchery stocks are intermixed with other sockeye stocks and other salmon species to the extent that no targeted harvest can occur within the commercial fishery or mainstream inriver fisheries. Enhanced returns are therefore harvested at the rate that can be sustained by wild stocks, generally between 50% and 60%. This wild stock priority creates surpluses of enhanced sockeye salmon when hatchery returns are large and wild stocks are weak, or less plentiful. These unharvested enhanced returns are designated as the hatchery surplus component of the inriver escapement goal in the Copper River District Salmon Management Plan. For planning purposes, the department annually estimates the hatchery surplus in the preseason forecast but the actual surplus will depend upon the run strength of the various wild and enhanced stocks. Recently, because of increased survivals of sockeye released in Crosswind Lake, the forecasted hatchery surplus has ranged from 58,600 fish in 1997 to 220,000 fish in 1999.

Gulkana Hatchery broodstock needs are estimated annually and are also included in the Copper River inriver run goal. Adequate fish should be available for broodstock needs at Gulkana Hatchery if the Copper River inriver escapement goal is attained at Miles Lake sonar.

Historically, the Gulkana Hatchery operator has only harvested fish for broodstock. Under state management, the facility was operated using general fund appropriations. Under PWSAC management, the facility harvested fish only for broodstock until 1997. Facility operating and capital costs have been met primarily through a 2% fishermen's assessment and through corporate revenues from the sale of Wally Noerenberg and Main Bay Hatchery salmon. In an effort to avoid excess fish entering Crosswind Lake, a Special Harvest Area was designated to allow the hatchery operator the opportunity to harvest returning adults. PWSAC established a cooperative program with a local contractor to harvest returning Crosswind Lake adult sockeye salmon and process them for market. PWSAC receives certain financial benefits from the sale of these fish to the contractor. No directed management is required to meet the adult return objectives at Crosswind Lake; the fish that are harvested for sale are considered cost recovery fish.

The Crosswind Lake Special Harvest Area consists of the waters of Dog Creek, west of approximately 145°52.83' W. Longitude, downstream to a weir located at approximately 62°34.70' N. Lat., 145°53.7' W. Long. (NAD 1983). PWSAC is allowed to construct a weir or series of weirs to conduct a cost recovery harvest. Seines or dip nets may be used to harvest cost recovery fish in the Special Harvest Area. PWSAC, or its contractor, harvests sockeye salmon during periods established by emergency order. All other species must be allowed free upstream or downstream passage. In order to provide state residents with the opportunity to use excess production from Crosswind Lake, PWSAC, or its contractor, may at their discretion, give away up to 30 sockeye per household to residents who come to the site and request fish.

Between 1997 and 1999, an average of 31,891 sockeye salmon have been harvested and sold from the Crosswind Lake Special Harvest Area. Following a return of some 20,000 sockeye in 1995, the return in 1996 jumped to 99,000 sockeye salmon. Between 1996 and 1999, the total return to Crosswind Lake has averaged 82,986 sockeye salmon.

When PWSAC is unable to harvest the surplus hatchery sockeye in the Special Harvest Area, all sockeye salmon in excess of escapement needs are destroyed under authority of the department. Although destruction of these fish is undesirable, allowing them to escape into Crosswind Lake is also problematic. At public meeting conducted by PWSAC during the winter of 1995/96, Crosswind Lake area landowners indicated that the increased escapements were unacceptable and that large numbers of salmon allowed into the lake would create a public nuisance.

The intent for developing this Special Harvest Area was to limit the return of surplus enhanced sockeye salmon into Crosswind Lake, provide local economic opportunity, and provide state residents with a source of salmon. There is negligible spawning habitat at Crosswind Lake and no natural production escapement goal has been established. This SHA will prevent most of the returning sockeye salmon from migrating into the system while providing benefits to both PWSAC and state residents.

The department is currently working with PWSAC to create a Basic Management Plan for Gulkana Hatchery that will revise current release numbers and release strategies so that the size of the hatchery's adult returns will be within the ability of the department to manage the mixed stock fishery for sustained yield of wild stocks. The desired result is a reduction of the annual hatchery surplus that has grown significantly larger in recent years while achieving wild stock escapement goals. In addition, mass marking of enhanced stocks will likely occur in the spring of 2000 as part of the cooperative effort between the department and PWSAC. The ability to accurately estimate the enhanced sockeye salmon contributions to the various fisheries in the Copper River will further support the department's efforts to manage for the wild stock priority while efficiently utilizing the enhanced sockeye salmon component of the return.

2000 PRINCE WILLIAM SOUND HERRING FISHERIES

PRESEASON OUTLOOK AND HARVEST STRATEGY

The Prince William Sound (PWS) herring management area (Appendix H.1) encompasses all coastal waters of the Gulf of Alaska between Cape Suckling and Cape Fairfield, extending offshore to 59° N. latitude. Five herring fisheries normally occur during the year (Appendices H.2 – H.14). All of the spring herring fisheries and the fall food/bait fishery were canceled prior to the season due to low stock abundance.

Five herring fisheries occur during the year. The gillnet sac roe, purse seine sac roe, spawn-on-kelp not in pounds, and spawn-on-kelp in pounds fisheries occur in the spring. A herring food/bait fishery occurs in the fall. All of the herring fisheries are managed for a guideline harvest level established by 5 AAC 27.365. PRINCE WILLIAM SOUND HERRING MANAGEMENT PLAN. The management objective for herring is to target fisheries on a high quality segment of the biomass.

During the spring season, two fisheries target herring for sac roe using either seine or gillnet gear. Two spawn-on-kelp fisheries harvest either naturally occurring spawn on kelp or spawn on kelp suspended in pounds. In the fall, a food/bait fishery occurs. Of the five herring fisheries, only the wild spawn-on-kelp and the food/bait fishery are open-entry fisheries.

For management purposes, all herring fisheries target on what is treated as a single major stock of herring that spawns during the mid-April to early-May period. At the 1994 BOF meeting in Cordova, the minimum spawning biomass threshold was raised from 8,400 to 22,000 tons for the PWS stock. No fishery may be opened if the estimated spawning biomass is below this level. The 22,000-ton threshold is 25% of the potential spawning biomass from an unfished stock. The higher threshold will establish manageable harvest levels while reducing the risk of driving the population to low abundance through overfishing. When the stock size is between 22,000 and 42,500 tons, the PWS Herring Management Plan allocates the projected available surplus to the five fisheries based on a 0 to 20% harvest rate. The maximum harvest rate of 20% is applied when stock size is greater than 42,500 tons. The sac roe seine fishery is allocated 58.1% of the available surplus; the food/bait fishery receives 16.3%; the pound spawn-on-kelp fishery receives 14.2%; the wild spawn-on-kelp fishery receives 8.0 %; and the gillnet sac roe fishery is allocated 3.4%.

During the December 1999 BOF meeting, several regulatory changes to PWS herring fisheries took place. Two of the new regulations could affect all five herring fisheries. New regulations were created that standardized PWS buyer, buyer's agent, or fisherman's fish ticket reporting requirements with those in other parts of the state and closed Tatitlek Narrows to all commercial herring fishing. The BOF also created new regulations that increased the legal depth of a purse seine used in the fall food/bait fishery and specified herring spawn-on-kelp pound marking requirements.

There are 104 permanent and 2 interim purse seine permits in Prince William Sound. Purse seines can be 150 fathoms in length and 1000 meshes deep. Mesh size is not regulated. There are 24 gillnet permits in Prince William Sound. Gillnets are limited to 100 fathoms in aggregate length and 120 meshes in depth. Mesh size is regulated from a minimum of 2 1/8 inches to a maximum of 3 inches. Historic sac roe harvest is presented in Appendix H.4. There are 128 herring pound permits in Prince William Sound. Seine specifications for the closed pound fishery are the same as the sac roe seine fishery. Open and closed pound fisheries can be managed separately or in combination. The size of the pound is limited to 2,000 square feet at the surface and walls of a closed pound cannot exceed 30 feet in depth. The herring allocation for this fishery is divided among the number of permit holders and the department establishes the maximum number of blades of kelp a permit holder may maintain in the pound. The historic pound spawn-on-kelp harvest is

presented in Appendix H.7. The wild spawn-on-kelp fishery, utilizing native Prince William Sound kelp, occurs after a major spawning event takes place on marketable species of kelp. Wild kelp is taken by divers or by hand picking, depending on the type of kelp available for harvest and market demand. The historic wild spawn-on-kelp fishery harvest is presented in Appendix H.6. The food/bait fishery season may run from October 1 through January 31; however, industry concerns over product quality usually results in a delay of the season's opening date until November. Purse seine size is not restricted for the food/bait fishery and trawling or gillnetting may also occur. The historic food/bait fishery harvest is presented in Appendix H.9. Historic fishery harvest values for all Prince William Sound fisheries are presented in Appendix H.13.

Although the Age Structure Analysis (ASA) model predicted that the spring of 2000 herring spawning biomass would be slightly above the 22,000-ton minimum threshold, the model assumed that an average age-3 recruitment to the fishery would occur over the winter of 2000. Herring samples collected during the spring of 1999 indicated that very few age-3 herring had recruited to the spawning biomass in 1999. As a result, the year 2000 forecast predicted an extremely low contribution from age-4 herring in the 2000 spawning biomass. Results from hydroacoustic surveys, aerial surveys, and disease sampling in 1999 appeared to indicate that the Prince William Sound herring population has suffered a decline of approximately 40%. The decline was centered primarily on age-3 and age-4 herring, and was likely the result of another outbreak of viral hemorrhagic septicemia (VHS). Younger aged herring appear to be particularly susceptible to this virus. While there were very few age-3 herring seen in samples collected in the spring of 1999, the decline may have been equally severe among herring aged 1 and 2.

2000 SEASON SUMMARY

In September, the department canceled the 1999 food/bait fishery, and all 2000 spring herring fisheries including the seine and gillnet sac roe harvests, the spawn-on-kelp in pound fishery, and the wild spawn-on-kelp harvest. Aerial surveys were then conducted from April 1 through April 27 to estimate biomass and document spawning activity. A total of 19.5 miles of spawn were observed this season with a majority of the spawn seen in the Eastern District. In comparison, there were 25.4 miles of spawn documented in 1999, 38.7 miles in 1998, 42.7 miles in 1997, and 27.2 miles in 1996. In general, from aerial observations it appears that the spawning biomass at Montague Island is less than in previous years. A total of 9.5 miles of spawn were documented in Port Gravina, 2.0 miles in Port Fidalgo, 1.5 miles in Sheep Bay, 5.5 miles at Montague Island, and 1.0 mile of spawn was seen in Fairmont Bay. Peak spawning occurred between April 10 and April 15. Some additional spawning may have occurred on non-survey days and on days with inclement weather that precluded flying. The peak aerial estimate for 2000 was 1,610 tons, a decrease of 4,800 tons from 1999. The biomass was distributed as follows: the Southeast Shore area had 1,200 tons; the Northeast shore had 15 tons; the North Shore had 60 tons; and the Montague Island area had 360 tons. No spawning activity was observed in the Naked Island area. There is a recognized imprecision in estimating biomass using aerial surveys, primarily because not all herring are visible from the air at all times. This is especially true in the Montague Island area where a majority of the PWS spawning biomass has been located in the past.

Size and age composition samples were collected at both Montague Island and from the Eastern District during the spring of 2000. At Montague Island, age-5 and age-6 year classes predominated the spawning biomass. Average weights ranged from 141 grams to 155 grams. Of particular note was the extremely low percentage of age-4 herring in the samples collected. Age-4 herring comprised less than 2.5% of all the samples collected indicating very poor recruitment from the 1996 year-class. The current hypothesis is that the 1996 year-class may have suffered high mortality from VHS during the summer of 1998. This could explain, in part, the overall low abundance seen in the spring during 1999 and 2000. Size and age composition samples from eastern PWS contained consistently smaller fish with slightly different predominant age classes in the spawning population. Average sizes for samples collected at St. Matthews

Bay and Sheep Bay ranged from 105 grams to 123 grams. Age-3 and age-5 year classes predominated these samples with age-6 being the third most prevalent year class.

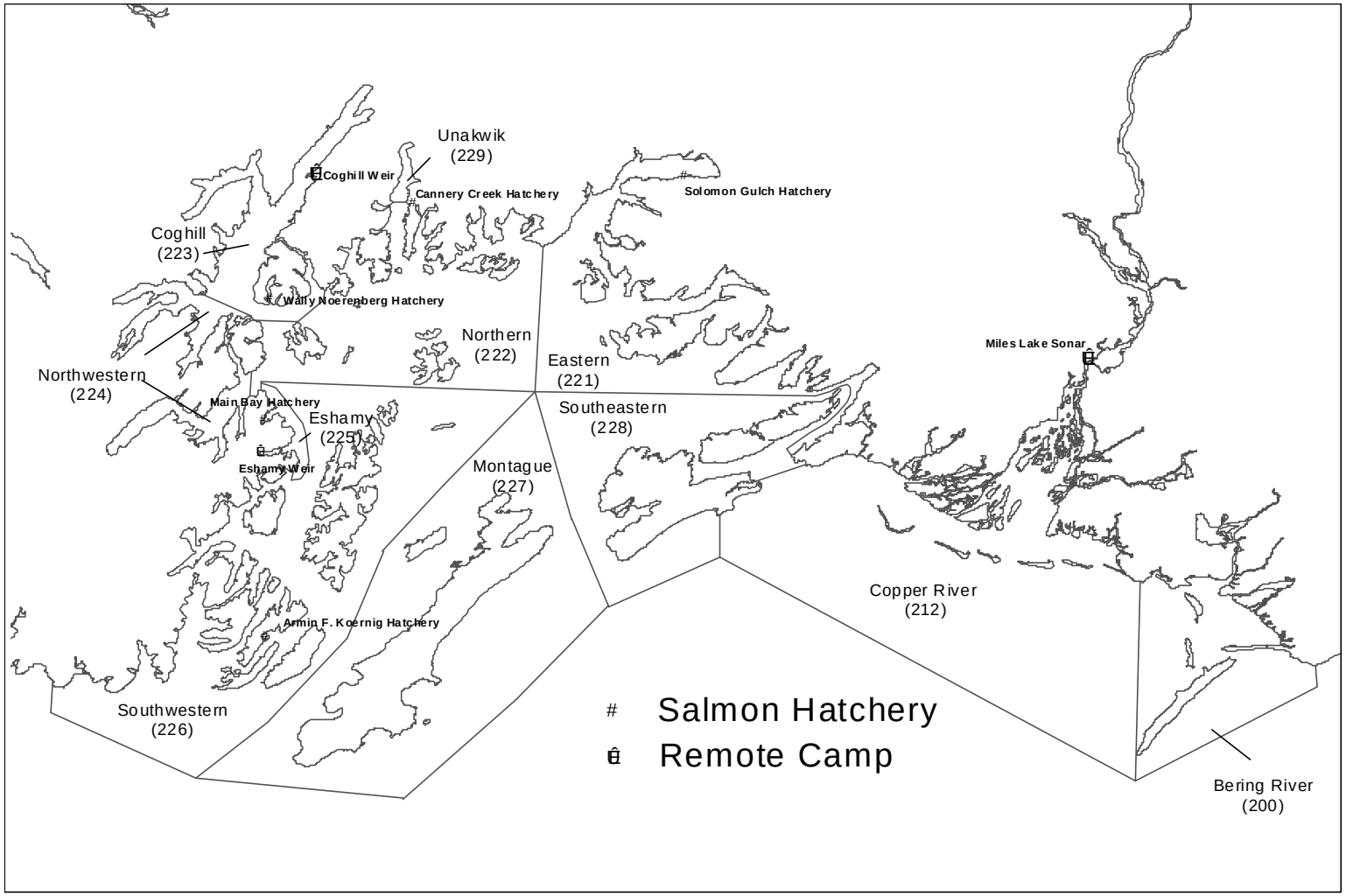
2000-2001 HERRING SEASON OUTLOOK

Given the PWS herring spawning population's current size and age structure, a commercial harvest is not anticipated to occur in 2001. Consecutive years of low recruitment will further delay the recovery of the herring population to a sustainable size that is capable of supporting a commercial harvest. The department will continue to monitor the PWS herring biomass to assess growth and recruitment. An ongoing disease study will continue to examine the incidence of VHS in the PWS herring population.

LITERATURE CITED

Fried, S.M. 1994. Pacific salmon spawning escapement goals for the Prince William Sound, Cook Inlet, and Bristol Bay areas of Alaska. Alaska Department of Fish and Game, Commercial Fisheries Division, Special Publication No. 8, Juneau.

APPENDIX A: PRINCE WILLIAM SOUND AREA WIDE INFORMATION



Appendix A.1. Prince William Sound Area showing commercial fishing districts, salmon hatcheries, weir locations, and the Miles Lake sonar camp.

Appendix A.2. Commercial salmon harvest by species, gear type and district in the Prince Sound Management Area, 2000.

District[a]	Effort	Chinook	Sockeye	Coho	Pink	Chum	Total
Eastern	129	70	2,182	186,641	9,819,466	240,299	10,248,658
Northern	94	9	3,688	2,689	4,073,135	9,874	4,089,395
Coghill	70	1	2,984	31,991	3,271,314	1,338	3,307,628
Northwestern	6	1	2,069	392	17,223	581	20,266
Southwestern	100	49	23,530	41,529	9,308,399	428,665	9,802,172
Montague	54	58	127	16	87,634	992,253	1,080,088
Southeastern	32	1	112	827	549,763	71,565	622,268
Unakwik	3	0	0	0	20,485	0	20,485
Purse Seine	131	189	34,692	264,085	27,147,419	1,744,575	29,190,960
Bering River	69	5	1,279	56,329	0	0	57,613
Copper River	525	31,259	880,334	304,944	9,804	5,363	1,231,704
Unakwik	7	0	1,119	0	0	20	1,139
Coghill	454	269	176,452	82,869	88,228	1,643,801	1,991,619
Eshamy	273	634	235,085	5,396	375,250	27,511	643,876
Drift Gillnet	535	32,167	1,294,269	449,538	473,282	1,676,695	3,925,951
Eshamy	28	41	101,105	662	139,008	12,319	253,135
Set Gillnet	28	41	101,105	662	139,008	12,319	253,135
Solomon Gulch	1	0	0	1	4,033,635	515	4,034,151
Cannery Creek	1	0	0	0	1,538,039	0	1,538,039
Wally Noerenberg	1	0	0	0	3,536,232	1,723,366	5,259,598
Main Bay	1	0	218	0	0	5,829	6,047
Armin F. Koernig	1	0	0	0	2,017,913	166	2,018,079
Hatchery[b]	5	0	218	1	11,125,819	1,729,876	12,855,914
Donated Fish	146	6	434	0	0	0	440
Confiscated Fish	8	8	120	0	0	295	423
Total	154	14	554	0	0	295	863
Prince William Sound Total		32,411	1,430,838	714,286	38,885,528	5,163,760	46,226,823

[a] Does not include salmon taken for home use as reported on fish tickets.

[b] Hatchery sales for hatchery operating costs.

Appendix A.3. Commercial salmon harvest by species from all gear types, Prince William Sound Area, 1971 - 2000.

	Catch by Species					
Year [a]	Chinook	Sockeye	Coho	Pink	Chum	Total
1971	20,142	741,945	327,697	7,312,730	579,552	8,982,066
1972	23,003	976,115	124,670	57,090	46,088	1,226,966
1973	22,638	473,044	199,019	2,065,844	740,017	3,500,562
1974	20,602	741,340	76,041	458,619	89,210	1,385,812
1975	22,325	546,634	84,109	4,453,041	101,286	5,207,395
1976	32,751	1,008,912	160,494	3,022,426	370,657	4,595,240
1977	22,864	943,943	179,417	4,536,459	573,166	6,255,849
1978	30,435	505,509	312,930	2,917,499	489,771	4,256,144
1979	20,078	369,583	315,774	15,615,810	349,615	16,670,860
1980	8,643	208,724	337,123	14,161,023	482,214	15,197,727
1981	20,782	784,469	396,163	20,558,304	1,888,822	23,648,540
1982	47,871	2,362,328	623,877	20,403,423	1,336,878	24,774,377
1983	53,879	908,469	365,469	13,977,116	1,048,737	16,353,670
1984	39,774	1,303,515	609,484	22,119,309	1,229,185	25,301,267
1985	43,735	1,464,563	1,025,046	25,252,924	1,321,538	29,107,806
1986	42,128	1,288,712	426,240	11,410,302	1,700,906	14,868,288
1987	41,909	1,737,989	175,214	29,230,303	1,919,415	33,104,830
1988 [b]	31,797	767,674	477,816	11,820,121	1,843,317	14,940,725
1989 [b]	32,006	1,175,238	424,980	21,886,466	1,001,809	24,520,499
1990 [b]	22,163	911,607	524,274	44,165,077	967,384	46,590,505
1991 [c]	35,355	1,734,544	641,854	37,135,561	352,321	39,899,635
1992 [d]	41,306	1,771,612	619,460	8,637,116	334,376	11,403,870
1993 [e]	32,005	1,851,133	445,612	5,761,097	1,186,365	9,276,212
1994 [f]	48,558	1,514,329	1,058,154	36,886,301	1,058,213	40,565,555
1995 [f]	67,083	1,523,464	992,798	16,221,493	864,245	19,669,083
1996 [f]	56,457	3,000,602	459,253	26,042,942	2,103,559	31,662,813
1997 [f]	52,482	4,163,074	83,113	25,836,563	2,227,190	32,362,422
1998 [f]	70,910	1,715,778	194,621	28,685,115	1,271,911	31,938,335
1999 [f]	63,434	2,035,293	244,754	45,003,656	2,989,255	50,336,392
2000 [f]	32,411	1,430,838	714,286	38,885,528	5,163,760	46,226,823
Ten Year Average (1990-99)	48,975	2,022,144	526,389	27,437,492	1,335,482	31,370,482

[a] Includes catches by all gear types and hatchery sales from the Eastern, Northern, Coghill, Unakwik, Northwestern, Eshamy, Southwestern, Montague, Southeastern, Copper River and Bering River districts.

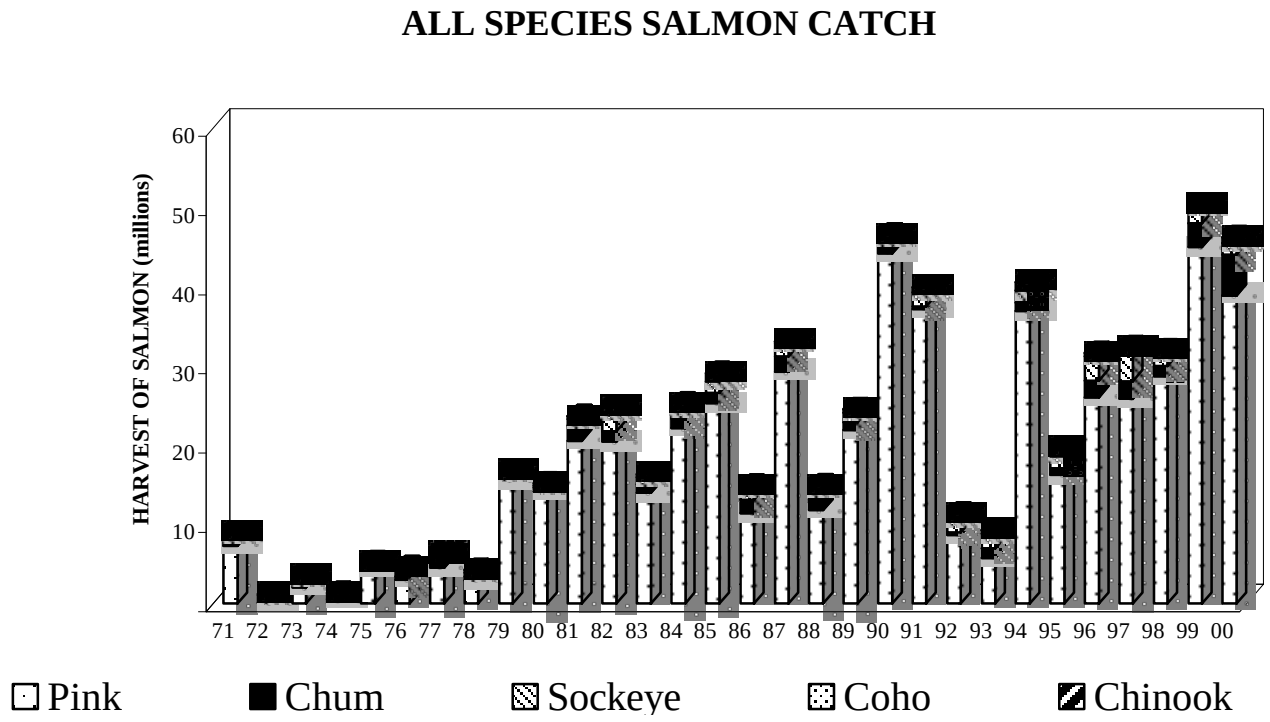
[b] Includes confiscated and educational special use permits. Also includes hatchery sales harvests and carcass sales.

[c] Includes confiscated and educational special use permits, hatchery sales harvests, donated and discarded catches.

[d] Includes catches from confiscated and educational special use permits, hatchery sales harvest and test fisheries.

[e] Includes catches from confiscated permits, hatchery sales harvests, donated fish harvest and test fisheries.

[f] Includes catches from confiscated permits, all hatchery sales harvests (including roe salvage) and test fisheries.



Appendix A.4. Commercial salmon harvest by species for all gear types combined, Prince William Sound, 1971 - 2000.

Appendix A.5. Mean price and estimated exvessel value of the total commercial salmon harvest by gear type, Prince William Sound, 2000.

PURSE SEINE

Species	Number	Pounds	Avg. Wt.	Price [a]	Value
Chinook	189	2,817	15	1	2,706
Sockeye	34,692	216,799	6	1	195,169
Coho	264,085	2,322,060	9	0	965,404
Pink	27,147,419	91,083,639	3	0	13,728,606
Chum	1,744,575	14,298,622	8	0	3,964,546
	29,190,960	107,923,937			18,856,431

DRIFT GILLNET

Species	Number	Pounds	Avg. Wt.	Price	Value
Chinook	32,167	670,508	21	4	2,698,417
Sockeye	1,294,269	8,436,026	7	2	13,554,212
Coho	449,538	4,358,694	10	1	2,486,184
Pink	473,282	1,617,101	3	0	177,559
Chum	1,676,695	13,370,173	8	0	3,550,614
	3,925,951	28,452,502			22,466,986

SET GILLNET

Species	Number	Pounds	Avg. Wt.	Price	Value
Chinook	41	719	18	4	2,902
Sockeye	101,105	659,269	7	1	912,603
Coho	662	5,970	9	1	3,343
Pink	139,008	468,577	3	0	53,160
Chum	12,319	97,238	8	0	25,641
	253,135	1,231,773			997,649

HATCHERY SALES [b]

Species	Number	Pounds	Avg. Wt.	Price	Value
Chinook					
Sockeye	218	1,407	6	0	478
Coho	1	9		0	2
Pink	11,125,819	39,740,804	4	0	6,358,529
Chum	1,729,876	13,724,141	8	0	4,007,449
	12,855,914	53,466,361			10,366,458

OTHER GEAR [c]

Species	Number	Pounds	Avg. Wt.	Price	Value
Chinook	14	315	23	4	1,266
Sockeye	554	3,715	7	2	5,944
Coho					
Pink					
Chum	295	2,309	8	0	600
	863	6,339			7,811

Gear Type	Value of Catch	No. of Permits	Average Earnings
Purse Seine	$18,856,431	131	$143,942
Drift Gillnet	$22,466,986	535	$41,994
Set Gillnet	$997,649	28	$35,630
Subtotal- Value of CPF Catch	$42,321,066		
Hatchery	$10,366,458		
Other Gear	$7,811		
GRAND TOTAL	$52,695,334		

[a] Mean prices are estimated at the end of the season based on the average of cash buy advance prices paid by the canneries on the grounds. They do not reflect the spring paid by some companies.

[b] Prices are an average of sales harvest prices excluding roe sales.

[c] Includes the sales of confiscated fish.

Appendix A.6. Average price paid to permit holders for salmon, Prince William Sound, 1991-2000.

Species [a]	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
King Salmon										
Copper/Bering Districts	$1.65	$2.50	$1.82	$1.43	$2.19	$1.96	$2.00	$2.07	$3.44	$4.02
Prince William Sound	$1.00	$1.55	$1.07	$0.80	$0.91	$0.71	$1.00	$0.94	$1.28	$1.59
Sockeye Salmon										
Copper River	$1.28	$2.50	$1.32	$1.27	$1.67	$1.38	$0.88	$1.49	$1.84	$1.72
Bering River	$1.28	$2.50	$1.40	$1.06	$1.44	$1.21	$0.88	$1.35	$1.81	$1.72
Coghill/Unakwik District	$1.28	$1.55	$0.93	$0.94	$0.75	$0.82	$0.80	$1.24	$1.60	$1.14
Eshamy	$1.28	$1.55	$0.86	$1.19	$1.06	$0.85	$0.80	$1.11	$0.89	$1.14
General Purse Seine	$1.00	$1.55	$0.83	$0.88	$0.94	$0.73	$0.85	$1.06	$1.18	$0.90
Coho Salmon										
Copper/Bering Districts	$0.65	$0.90	$0.80	$0.74	$0.52	$0.53	$0.30	$0.46	$0.58	$0.57
Prince William Sound	$0.45	$0.90	$0.77	$0.60	$0.42	$0.36	$0.30	$0.33	$0.33	$0.42
Pink Salmon	$0.12	$0.18	$0.16	$0.16	$0.18	$0.07	$0.12	$0.13	$0.15	$0.15
Chum Salmon	$0.40	$0.55	$0.68	$0.45	$0.45	$0.13	$0.27	$0.22	$0.21	$0.28

[a] Based on processor reports, fish tickets and other sources prior to 1995 . After 1995 prices are based on processor reports. A weighted average is generally used. Prices generally do not reflect post season adjustments and are an estimate. Caution should be used if using these prices to estimate value.

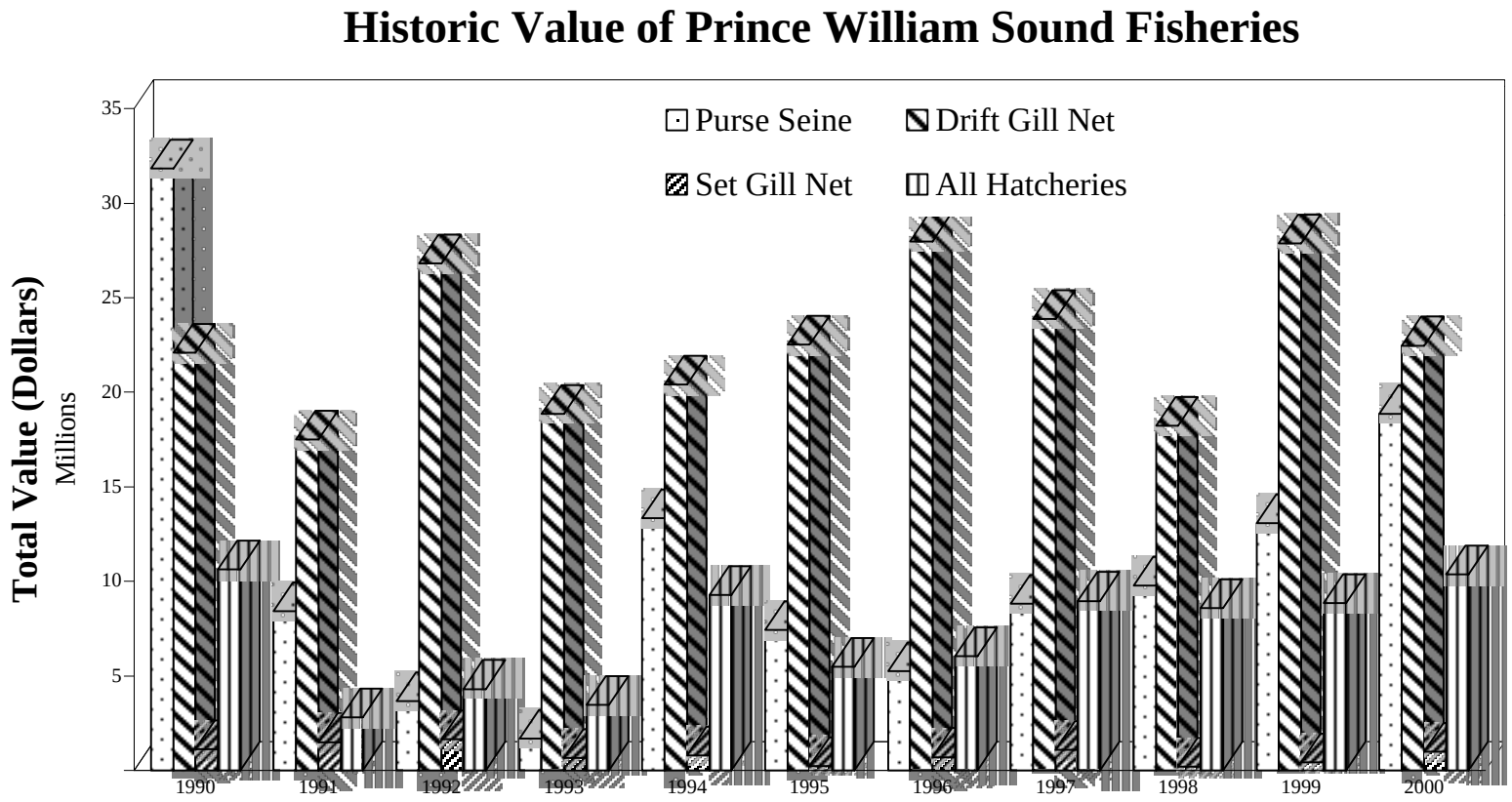
Appendix A.7. Estimated exvessel value of the total commercial salmon harvest by gear type, Prince William Sound, 1990 - 2000.

PURSE SEINE											
Species	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Chinook	2,178	1,732	2,044	379	1,104	1,169	570	3,422	4,386	7,427	2,706
Sockeye	219,753	113,493	313,794	169,236	432,156	205,178	111,337	151,532	127,854	141,923	195,169
Coho	388,516	49,165	277,682	21,288	208,661	327,260	314,773	125,946	124,325	329,317	965,404
Pink	29,428,887	8,148,452	2,950,733	1,469,531	12,537,403	6,736,581	4,445,231	6,795,323	8,565,392	9,456,108	13,728,606
Chum	1,792,801	107,202	125,639	22,344	164,181	152,047	386,967	1,742,759	950,912	3,128,816	3,964,546
	$31,832,135	$8,420,044	$3,669,892	$1,682,778	$13,343,505	$7,422,236	$5,258,878	$8,818,982	$9,772,869	$13,063,591	$18,856,431
DRIFT GILLNET											
Species											
Chinook	1,269,847	1,310,334	2,504,789	1,180,382	1,534,059	3,573,848	2,259,958	2,367,538	3,341,148	5,510,840	2,698,417
Sockeye	11,452,509	11,817,211	18,901,370	11,767,820	9,209,486	12,864,113	23,037,225	19,796,170	13,223,761	20,048,000	13,554,212
Coho	3,716,774	3,328,387	4,155,833	2,702,999	7,129,685	4,207,678	1,450,095	57,798	379,366	733,022	2,486,184
Pink	1,999,326	104,274	213,996	115,040	127,997	165,462	12,028	83,398	249,293	43,612	177,559
Chum	3,643,487	928,104	1,037,032	3,091,611	2,393,837	1,709,831	1,229,842	1,567,526	1,035,808	1,529,765	3,550,614
	$22,081,943	$17,488,310	$26,813,021	$18,857,852	$20,395,065	$22,520,932	$27,989,149	$23,872,430	$18,229,376	$27,865,239	$22,466,986
SET GILLNET											
Species											
Chinook	1,048	1,156	1,973	848	121	182	148	159	25	592	2,902
Sockeye	100,106	1,300,375	1,355,943	517,182	638,164	181,653	697,572	1,055,286	177,723	407,497	912,603
Coho	2,859	1,625	8,321	4,343	3,513	2,003	612	340	336	1,877	3,346
Pink	370,015	7,587	248,170	48,618	117,298	18,892	2,373	20,477	16,659	8,721	53,160
Chum	635,185	191,271	22,316	97,911	18,675	21,018	11,312	17,242	337	13,630	25,641
	$1,109,214	$1,502,013	$1,636,724	$668,901	$777,770	$223,747	$712,017	$1,093,504	$195,079	$432,317	$997,652
HATCHERY SALES											
Species											
Chinook	0	0	27,218	26,736	11,526	11,692	91	1,252	22,621	0	0
Sockeye	451	0	1,573,671	371,621	358,077	380,378	444,198	1,381,948	953,857	143,855	478
Coho	79,481	216,146	352,390	11,712	82,571	28,759	100,413	7,090	63,980	0	2
Pink	10,443,198	2,573,773	2,196,778	1,472,128	7,222,015	4,157,847	4,076,578	5,814,214	6,283,525	6,312,337	6,358,529
Chum	101,985	14,609	157,616	1,576,882	1,598,524	895,509	1,430,814	1,758,276	1,261,354	2,380,321	4,007,449
	$10,625,115	$2,804,528	$4,307,673	$3,459,882	$9,272,731	$5,474,186	$6,052,094	$8,965,780	$8,585,338	$8,836,513	$10,366,458
OTHER GEAR											
Species											
Chinook	2,062	3,699	143	154	143	25	76	0	5,004	448	1,266
Sockeye	10,095	9,638	80,141	52,272	3,686	27,880	2,582	2,085	2,085	68,525	5,944
Coho	3,513	2,967	5,293	751	89	479	0	0	10	106	
Pink	12,746	7,971	2,066	9,084	28,287	88,152	0	1	271	81,476	
Chum	15,467	1,718	13,389	16,066	35,139	4,234	1	190	13	358	600
	$43,883	$25,993	$101,031	$78,327	$67,344	$120,771	$2,659	$2,276	$7,383	$150,913	$7,811

AVERAGE EARNINGS	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Purse Seine	$119,670	$33,281	$17,729	$11,686	$78,032	$39,691	$58,432	$77,359	$65,590	$93,983	$143,942
Drift Gillnet	$42,141	$33,696	$50,782	$36,688	$39,990	$43,477	$54,989	$45,909	$34,922	$53,280	$41,994
Set Gillnet	$38,249	$51,794	$54,557	$22,297	$29,914	$8,606	$26,371	$42,058	$12,192	$20,587	$35,630

NUMBER OF PERMITS FISHED											
Purse Seine	266	253	207	144	171	187	90	114	149	139	131
Drift Gillnet	524	519	528	514	510	518	509	520	522	523	535
Set Gillnet	29	29	30	30	26	26	27	26	16	21	28

Total All Combined'	$65,692,290	$30,240,888	$36,528,341	$24,747,740	$43,856,415	$35,761,872	$40,014,797	$42,752,972	$36,790,045	$50,348,573	$52,695,338



Appendix A.8. Exvessel value of the commercial salmon harvest by gear type, 1990 -2000.

Appendix A.9. Preseason harvest projections for the 2000 commercial salmon fishery by district and species, Prince William Sound Area.

COMMERCIAL HARVEST (1,000's of fish)

	Chinook		Sockeye		Coho		Pink		Chum	
District [a]	Point Estimate	Range	Point Estimate	Range	Point Estimate	Range	Point Estimate	Range	Point Estimate	Range
Copper River [b]	60.8	49.7-71.8	720.0	270.0-1,510.0	295.3	58.6-532.0				
Bering River [c]					120.5	0.0-273.6				
Coghill [d]			563.8	215.8-1,423.8						
Eshamy			26.1	6.6-45.5						
General P.W.S. Districts			10.8	8.3-13.2			5,200.0	0.0-10,500.0	570.0	380.0-750.0
Total Wild Stock	60.8	49.7-71.8	1,320.7	500.7-2,992.5	415.8	58.6-805.0	5,200.0	0.0-10,500.0	570.0	380.0-750.0
Solomon Gulch					120.4	94.3-144.6	2,900.0	200.0-6,700.0		
Armin F. Koernig							3,900.0	2,200.0-6,100.0	50.0	30.0-70.0
Wally Noerenberg [e]					78.0	61.9-94.1	3,500.0	1,600.0-5,800.0	2,390.0	1,310.0-3,520.0
Cannery Creek							2,700.0	1,700.0-4,100.0		
Main Bay [f]			182.0	174.7-192.3						
Gulkana			640.0	240.0-1,040.0						
Total Hatchery			822.0	414.7-1,232.3	198.4	156.2-238.7	13,000.0	5,700.0-22,700.0	2,440.0	1340.0-3,590.0
Total Hatchery and Wild	60.8	49.7-71.8	2,142.7	915.4-4,224.7	614.2	214.8-1,043.7	18,200.0	5,700.0-33,200.0	3,010.0	1,720.0-4,340.0

[a] Formal forecast procedures are used for estimating wild stock returns for pink and chum salmon in Prince William Sound. Hatchery contributions are based on known fry releases and average marine survival rates. General P.W.S. sockeye production is based upon average harvest. Harvest estimates are made only for those species which constitute a significant portion of the catch. The harvest projections do not include salmon projected for harvest by hatcheries for cost rec

[b] Formalized forecast procedures are used for Copper River chinook and sockeye returns. Copper River coho catches are based on mean annual harvest.

[c] Bering River coho harvest estimates are based on mean annual harvest.

[d] Coghill sockeye returns are formally forecast using a sibling relationship model for the major age class and spawner recruit relationships for other age classes. The Coghill District's wild pink and chum harvest is included in the "General PWS Districts" projection.

[e] WHN chum harvest estimate includes all on-site and remote returns of chum salmon.

[f] Main Bay sockeye harvest estimate includes all on-site and remote returns of sockeye salmon.

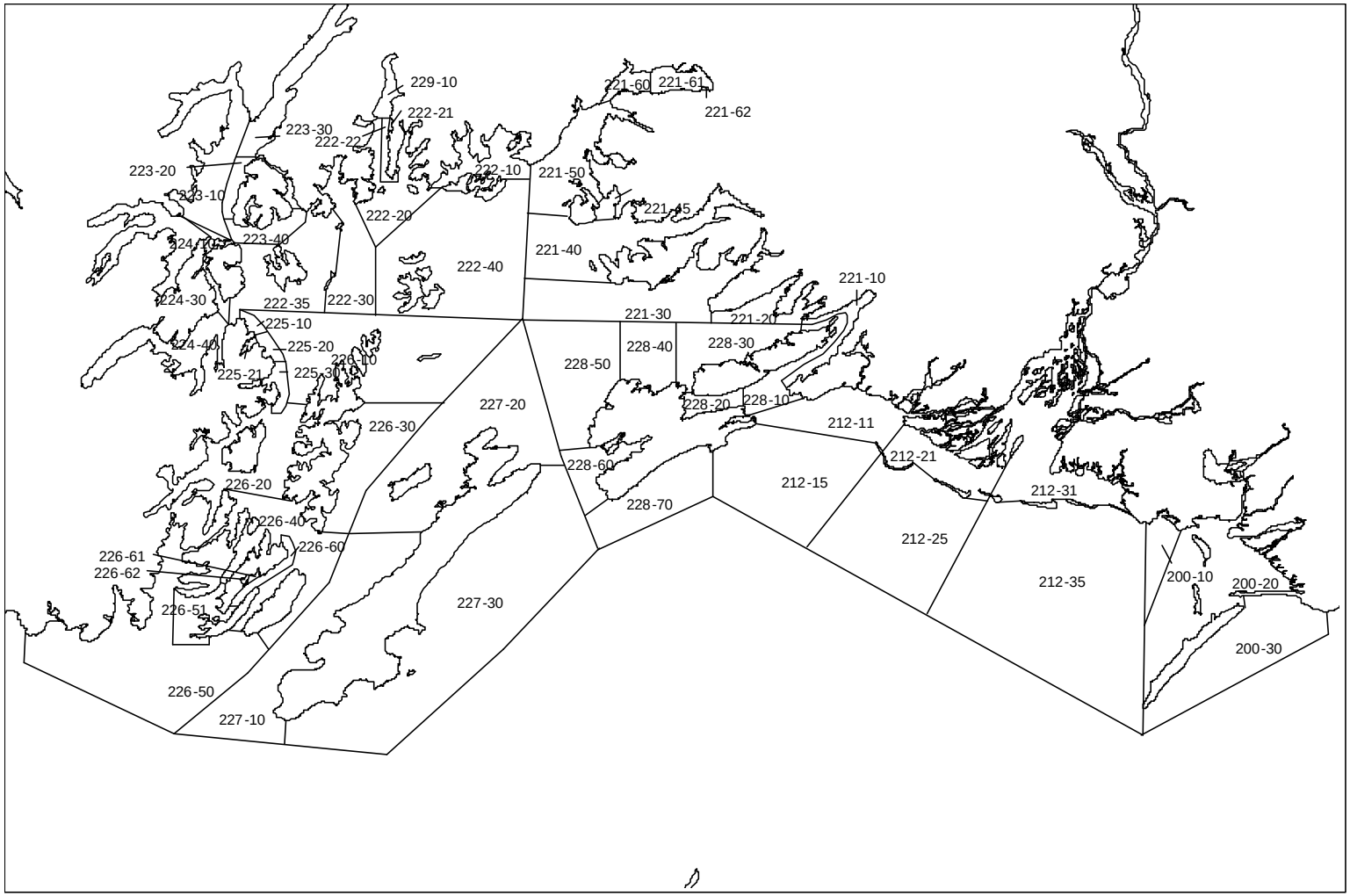
Appendix A.10. A listing of finfish processors, their location of operation, and type of product processed, Prince Willam Sound Area, 2000.

Executive Names, Address Location of Operations	Processor Code	Type of Product	Executive Names, Address Location of Operations	Processor Code	Type of Product
Anchor Services Box 606 Kenai, AK 99611 Paul MacMullin	F3534	Salmon	Inlet Fisheries P.O. Box 530 Kenai, Alaska 99611 Scott Earsley	F1039	Salmon
Bear and Wolf Salmon Co. 4209 21st Ave W. Seattle, WA 98199 Peter Kuttel	F4287	Salmon	Kenai Custom Seafoods Box 1649 Kenai, Alaska 99611 James Hill Jr.	F3752	Salmon
Cook Inlet Processing P.O. Box 8163 Nikiski, Alaska 99635 Pat Hardina	F0186 F1155 F2448	Salmon	Little Purser Partnership Box 930 Valdez, AK 99686 Dan Daniels	F3835	Salmon
Copper River Seafoods P.O. Box 158 Cordova, AK 99574 Robyn Wamser	F2977	Salmon	Nautilus Foods P.O. Box 727 Valdez, AK 99686 Tom Waterer	F2003	Salmon
Flopping Fresh Fish Company Box 572 Bellingham, WA 98227 Buck Meloy	F3625	Salmon	Norquest Seafoods P.O. Box 260 Cordova, AK 99574 Bill Gilbert	F1486	Salmon
FAVCO Box 190968 Anchorage, AK 99519 Will Hildebrand	F0398	Salmon	North Pacific Processors, Inc. P.O. Box 1040 Cordova, Alaska 99574 Ken Roemhildt	F0232	Salmon
Glacier Creek H.C. Box 8610 Bird Creek, AK 99540 Steve Aberle	F1826	Salmon	Ocean Beauty Seafoods P.O. Box 548 Cordova, AK 99574 Hap Symmonds	F1929 F1930	Salmon
Glacier Fish P.O. Box 1989 Seward, AK Keith Bailey	F1979	Salmon	Pagan Fisheries Box 447 Girdwood, AK John Herschleb	F4340	Salmon
Great Pacific Seafoods, Inc. P.O. Box 710 Whittier, AK 99693 Andrea Tesch	F1267 F2857	Salmon	Peter Pan Seafoods, Inc. P.O. Box 1027 Valdez, Alaska 99686 Mark Hansen	F1041	Salmon
Icicle Seafoods Inc. P.O. Box 8 Seward, Alaska 99664 Tim Schmidt	F0134 F0135 F0138	Salmon	Polar Sea Box 8163 Nikiski, AK 99635 Bill Fejes	F4054	Salmon

-continued-

Appendix A.10. (page 2 of 2)

Executive Names, Address Location of Operations	Processor Code	Type of Product	Executive Names, Address Location of Operations	Processor Code	Type of Product
Potter's Own Fine Fish Box 1472 Cordova, AK 99574 Carol Potter	F4225	Salmon	Smoki Foods 19002 13th Place #3 Seattle, WA Rodger May	F4221	Salmon
Prime Select Seafoods, Inc. P.O. Box 846 Cordova, Alaska 99574 Susan Laird	F1816	Salmon	Snug Harbor Box 701 Kenai, AK 99611 Brenda Stoops	F3894	Salmon
Prince William Sound Aquacultu P.O. Box 1110 Cordova, Alaska 99574 Monica Bradley	F1901,F1903 F2465 F2902 F3468	Salmon Salmon roe	Valdez Fisheries Development P.O. Box 125 Valdez, Alaska 99686 Dave Cobb/Laura Weaver	F1355	Salmon Salmon roe
Sahalee of Alaska, Inc. P.O. Box 104174 Anchorage, Alaska 99510 Elizabeth Basila	F1485	Salmon	Wild Card Inc. P.O. Box 1871 Cordova, AK 99574 Lisa Walters	F1822	Salmon
Sea Hawk Seafoods P.O. Box 247 Valdez, AK 99686 Marie Morris/Cary Cox	F0223	Salmon			



Appendix A.11. Prince William Sound Area showing commercial fishing districts and statistical reporting areas, 2000.

APPENDIX B: COPPER AND BERING RIVER DISTRICTS

Appendix B.1. Commercial salmon catch by species in the Copper River District, 1974-2000.

Year	Catch by Species					Total
	Chinook	Sockeye	Coho	Pink	Chum	
1974	18,980	607,766	46,625	9,839	664	683,874
1975	19,644	335,384	53,805	236	807	409,876
1976	31,479	865,195	111,900	3,392	178	1,012,144
1977	21,722	602,737	131,356	23,185	335	779,335
1978	29,062	249,872	220,338	3,512	2,233	505,017
1979	17,678	80,528	194,885	1,295	107	294,493
1980	8,454	18,908	225,299	3,966	198	256,825
1981	20,178	477,662	310,154	23,952	1,799	833,745
1982	47,362	1,177,632	454,763	7,154	1,177	1,688,088
1983	52,500	626,735	234,243	7,345	2,217	923,040
1984	38,957	900,043	382,432	32,194	6,935	1,360,561
1985	42,214	927,553	587,990	19,061	5,966	1,582,784
1986	40,670	780,808	295,980	3,016	17,614	1,138,088
1987	41,001	1,180,782	111,599	31,635	14,796	1,379,813
1988	30,741	576,950	315,568	2,775	11,022	937,056
1989	30,863	1,025,923	194,454	25,877	5,845	1,282,962
1990	21,702	844,778	246,797	1,596	7,545	1,122,418
1991	34,787	1,206,811	385,086	1,246	20,220	1,648,150
1992	39,810	970,938	291,627	1,664	5,807	1,309,846
1993	29,727	1,398,234	281,469	9,579	13,002	1,732,011
1994	47,061	1,152,220	677,633	12,079	19,055	1,908,048
1995	65,675	1,271,822	542,658	19,809	56,100	1,956,064
1996	55,646	2,356,365	193,042	6,372	25,533	2,636,958
1997	51,273	2,955,431	18,656	8,483	2,465	3,036,308
1998	68,827	1,341,692	108,232	20,829	5,022	1,544,602
1999	62,337	1,682,559	153,061	10,205	25,321	1,933,483
2000	31,259	880,334	304,944	9,804	5,363	1,231,704
Ten Year Average (1990-99)	47,685	1,518,085	289,826	9,186	18,007	1,882,789

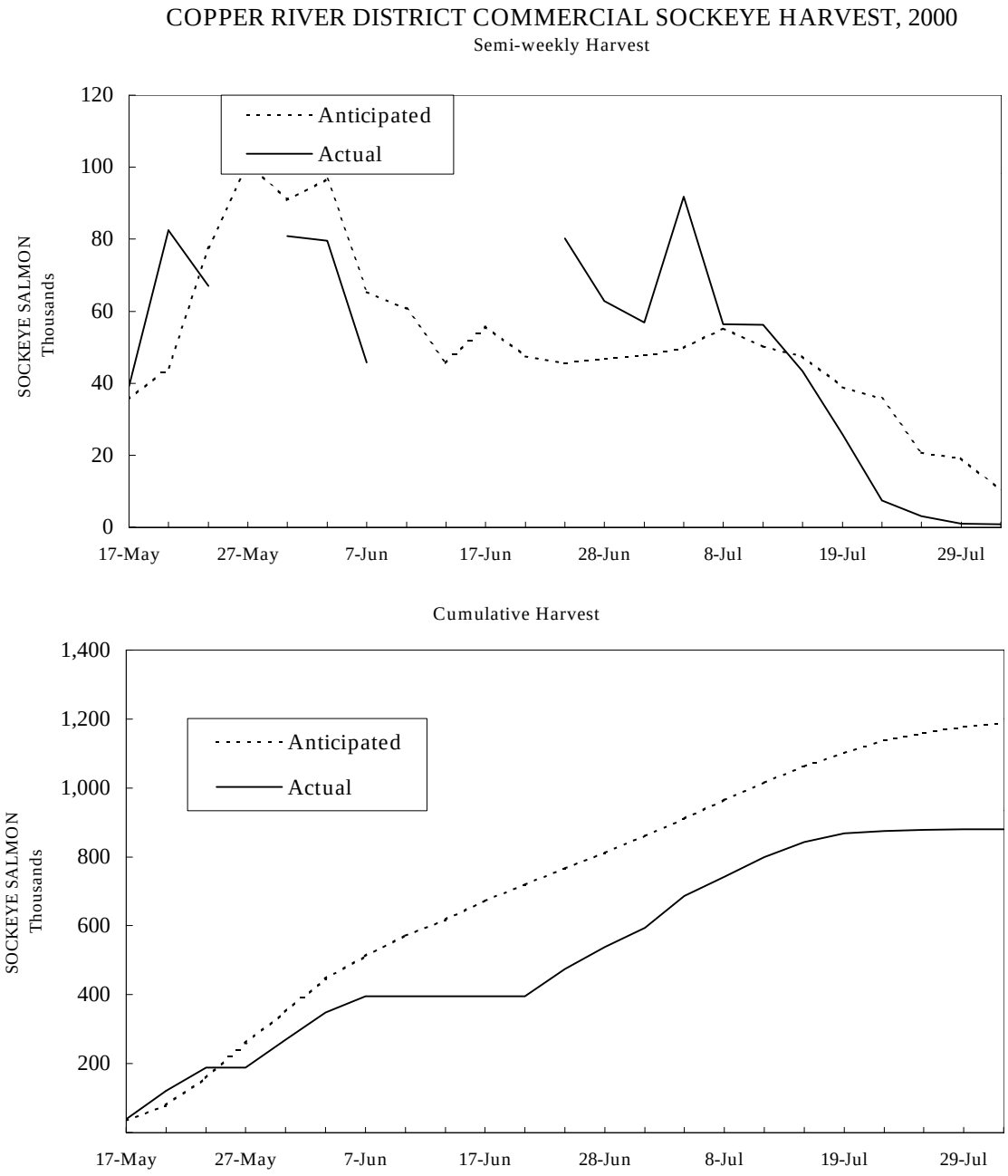
Appendix B.2. Anticipated and actual weekly catch and escapement of sockeye salmon in the Copper River District drift gillnet fishery, 2000.

Semi-Weekly Date	Fishing Time (Hrs.)	Actual Catch	Anticipated Catch [a]	Anticipated Cumulative Escapement [b]	Actual Cumulative Escapement [c]
May 17 Wed	12	39,131	35,477	344	-
May 20 Sat	12	82,482	44,334	3,661	1,151
May 24 Wed	12	66,989	77,673	13,737	3,623
May 27 Sat	0		101,085	29,178	8,493
May 31 Wed	6	80,820	90,801	60,752	43,463
June 03 Sat	12	79,496	96,622	93,282	74,722
June 07 Wed	12	45,710	65,441	144,654	104,311
June 10 Sat	0		60,676	185,827	123,493
June 14 Wed	0		45,560	230,119	161,124
June 17 Sat	0		55,811	259,495	182,744
June 21 Wed	0		47,483	289,429	232,688
June 24 Sat	12	80,270	45,583	311,518	284,076
June 28 Wed	24	62,784	46,792	338,472	334,390
July 01 Sat	24	56,801	47,683	360,190	366,215
July 05 Wed	36	91,881	49,719	399,159	411,138
July 08 Sat	36	56,405	55,208	433,656	436,528
July 12 Wed	36	56,167	50,269	491,150	480,182
July 15 Sat	36	43,359	47,464	534,595	505,395
July 19 Wed	36	25,820	38,979	595,908	529,400
July 22 Sat	24	7,378	35,729	638,785	545,949
July 26 Wed	12	3,042	20,777	683,464	565,991
July 29 Sat	12	942	19,170	707,387	576,113
Aug 02 Wed	12	877	10,142	733,668	585,550
Total	366	880,354	1,188,478	733,668	587,497

[a] Based on average historic catches for comparable dates (1992-1999).

[b] Based on historical escapements at Miles Lake sonar, includes upriver chinook escapement component and sockeye broodstock for the Gulkana Hatchery. Does not include sockeye escapements for the Copper/Bering delta streams.

[c] Escapement estimate from sonar counters at Miles Lake. Sonar counts ended August 3



Appendix B.3. Anticipated versus actual semi-weekly and cumulative harvest of sockeye salmon in the Copper River drift gillnet fishery, 2000.

Appendix B.4. Commercial salmon harvest by period in the Copper District drift gillnet fishery, 2000.

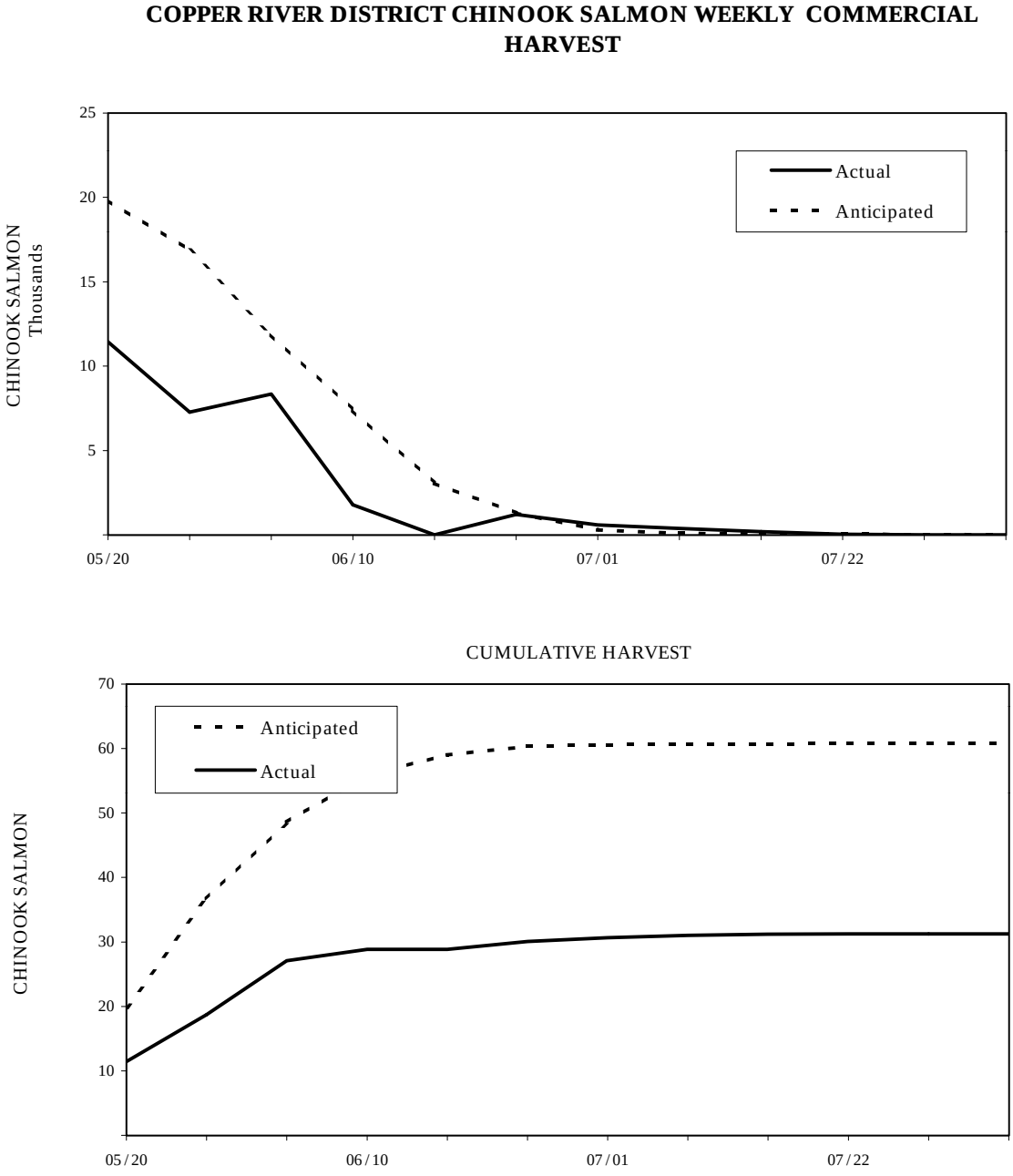
					Chinook		Sockeye		Coho		Pink		Chum	
Period	Date [a]	Hours	Permits	Landings	Numbers	Pounds	Numbers	Pounds	Numbers	Pounds	Numbers	Pounds	Numbers	Pounds
01	05/15	12	480	536	5,875	119,713	38,851	232,095	2	12	0	0	25	220
02	05/19	12	494	624	5,564	115,548	85,602	505,780	12	92	0	0	156	1,193
03	05/22	12	472	599	7,278	151,459	68,603	405,315	0	0	0	0	37	313
04	05/29	6	499	532	4,070	88,469	80,782	487,874	1	10	0	0	25	209
05	06/01	12	495	618	4,279	94,249	78,888	479,522	0	0	0	0	92	755
06	06/05	12	439	515	1,788	40,030	46,023	286,433	0	0	0	0	84	700
07	06/23	12	299	368	1,213	24,781	80,052	519,852	7	63	3	12	120	900
08	06/26-06/27	24	320	455	364	8,494	62,063	409,256	31	213	468	1,763	1,232	9,487
09	06/29-06/30	24	267	354	215	4,595	56,841	374,041	17	119	282	980	577	4,362
10	07/03-07/04	36	226	439	224	4,946	88,486	603,353	52	348	34	93	141	1,201
11	07/06-07/08	36	244	463	149	3,146	55,608	376,595	433	3,252	893	3,382	1,073	8,534
12	07/10-07-12	36	269	514	120	2,675	54,672	370,520	376	2,930	808	2,859	640	5,128
13	07/13-07/15	36	264	445	69	1,313	43,132	297,813	969	7,161	989	4,059	451	3,637
14	07/17-07/18	36	203	304	27	520	25,691	170,927	984	7,145	1,218	4,524	411	3,244
15	07/20-07/21	24	99	114	5	76	6,948	45,301	486	3,146	462	1,689	133	1,085
16	07/24	12	98	100	2	11	3,068	19,689	1,247	9,129	438	1,564	62	522
17	07/28	12	34	36	3	47	934	5,677	559	3,841	226	764	8	67
18	07/31	12	34	36	0	0	872	5,466	1,436	10,422	759	2,559	5	35
19	08/04	12	42	44	0	0	493	3,248	2,353	17,507	457	1,667	27	219
20	08/07-08/08	24	122	147	5	102	1,380	9,236	11,833	99,350	2,485	9,034	56	443
21	08/14-08/15	24	204	320	2	46	705	4,560	33,293	309,909	236	796	3	26
22	08/21-0822	36	269	606	5	132	477	3,052	87,042	853,333	4	13	4	23
23	08/28-08/29	36	293	659	2	49	136	878	79,659	785,359	42	144	1	8
24	09/04-09/05	36	274	427	0	0	24	147	40,725	405,603	0	0	0	0
25	09/11-09/12	36	142	264	0	0	2	14	25,215	250,760	0	0	0	0
26	09/18-09/19	36	89	145	0	0	0	0	13,584	136,329	0	0	0	0
27	09/25-09/26	36	52	65	0	0	0	0	4,590	47,003	0	0	0	0
28	10/02-10/03	36	1	1	0	0	1	8	38	387	0	0	0	0
Total			525	9,728	31,259	660,401	880,334	5,616,652	304,944	2,953,423	9,804	35,902	5,363	42,311
Average Weight						21.13		6.38		9.69		3.66		7.89

Appendix B.5. Anticipated and actual weekly catch of chinook and coho salmon in the Copper River District drift gillnet fishery, 2000.

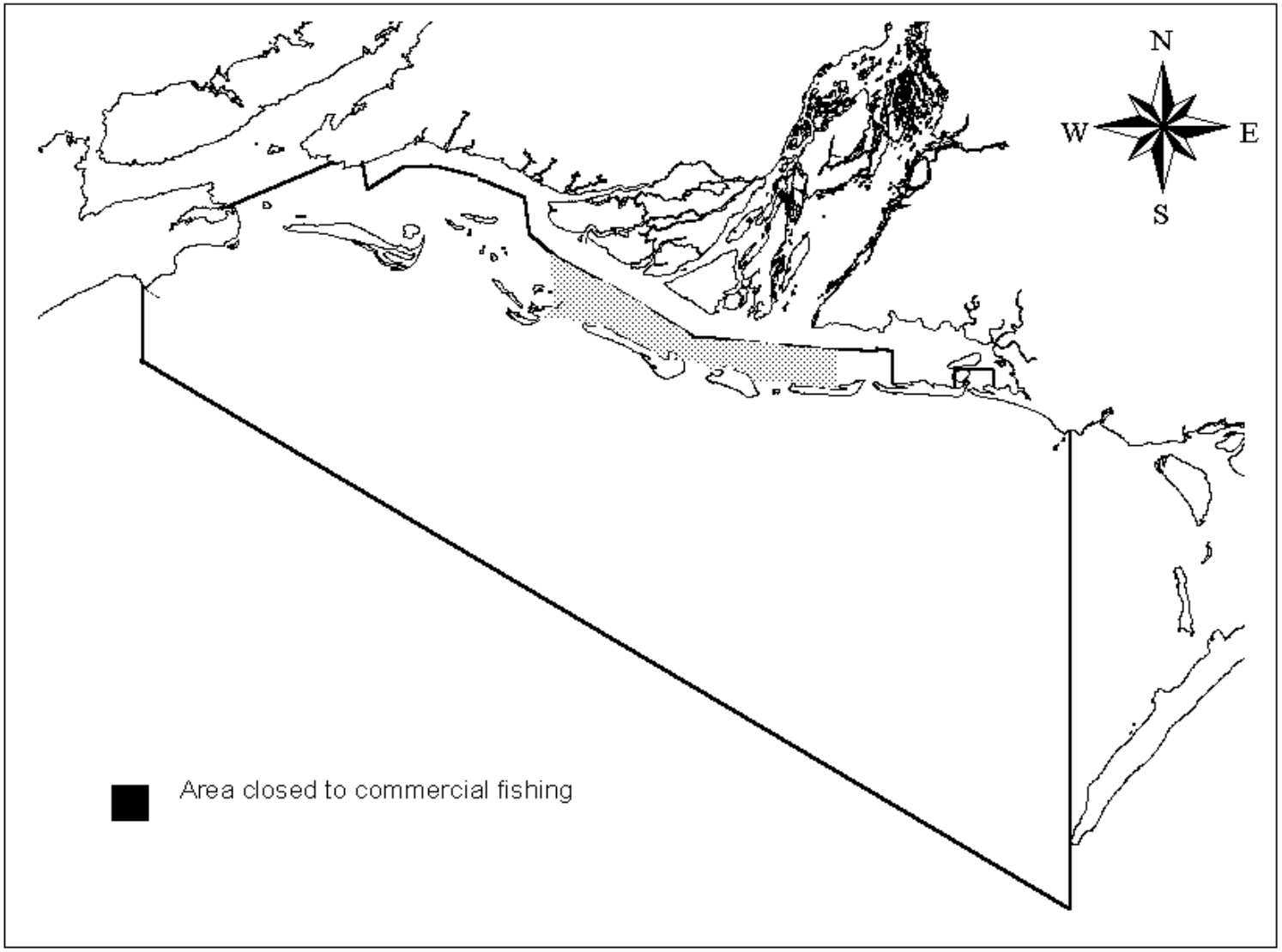
Week Ending Date	Length of Fishing Periods (Hrs)	Chinook Actual Catch	Chinook Anticipated Catch [a]	Coho Actual Catch	Coho Anticipated Catch [a]
20-May	12 and 12	11,439	19,834	14	
27-May	12 and 0	7,278	16,854	0	
3-Jun	6 and 12	8,349	11,875	1	
10-Jun	12 and 0	1,788	7,388	0	
17-Jun	0 and 0	0	3,055	0	
24-Jun	0 and 12	1,213	1,298	7	
1-Jul	24 and 24	579	289	48	
8-Jul	36 and 36	373	89	485	
15-Jul	36 and 36	189	50	1,345	
22-Jul	36 and 24	32	34	1,470	
29-Jul	12 and 12	5	12	1,806	3,095
5-Aug	12 and 12	0	3	3,789	7,571
12-Aug	24	5		11,833	19,200
19-Aug	24	2		33,293	38,992
26-Aug	36	5		87,042	57,545
2-Sep	36	2		79,659	63,045
9-Sep	36	0		40,725	53,611
16-Sep	36	0		25,215	30,395
23-Sep	36	0		13,584	12,344
30-Sep	36	0		4,590	4,251
7-Oct				38	1,139
					92
Season Total	678	31,259	60,781	304,944	291,280

[a] Based on average historic catches for comparable dates (1969 - 1993).

[b] The anticipated cumulative harvest through July 23.



Appendix B.6. Anticipated versus actual weekly and cumulative harvest of chinook salmon in the Copper River drift gillnet fishery, 2000.



B.7. Copper River District area closed to commercial fishing during the first two periods, 2000.

Appendix B.8. Daily sockeye salmon escapement estimates at Miles Lake sonar, 2000.

		Estimated Daily Escapement				Escapement Objective			
Date	Water Level [a]	North Bank	South Bank	Daily	Cumulative	Daily	Cumulative	0600 Count	Projected Daily
16-May	39.32	0		0	0	0	0		
17-May	39.31	0	0	0	0	344	344		
18-May	39.35	111 [c]	226 [b]	337	337	824	1,168		
19-May	39.44	150 [c]	306	456	793	1,158	2,326	86	344
20-May	39.57	118 [c]	240	358	1,151	1,335	3,661	62	248
21-May	39.57	156 [c]	318	474	1,625	1,346	5,007	28	112
22-May	39.57	152 [c]	310	462	2,087	1,872	6,878	64	256
23-May	39.52	197 [c]	403	600	2,687	2,720	9,598	92	368
24-May	39.47	308 [c]	628	936	3,623	4,139	13,737	74	296
25-May	39.49	407 [c]	830	1,237	4,860	4,297	18,035	74	296
26-May	39.52	345 [c]	704	1,049	5,909	4,587	22,622	102	408
27-May	39.51	850 [c]	1,734	2,584	8,493	6,557	29,178	200	800
28-May	39.65	1,059 [c]	2,161	3,220	11,713	8,580	37,758	382	1,528
29-May	39.74	2,779 [d]	7,085	9,864	21,577	6,173	43,931	842	3,368
30-May	39.85	4,589	7,863	12,452	34,029	7,275	51,206	2,253	9,012
31-May	39.99	2,916	6,518	9,434	43,463	9,547	60,752	1,107	4,428
01-Jun	40.09	2,319	8,038	10,357	53,820	10,022	70,774	1,364	5,456
02-Jun	40.17	2,011	7,355	9,366	63,186	11,477	82,252	1,180	4,720
03-Jun	40.28	3,272	8,264	11,536	74,722	11,030	93,282	2,096	8,384
04-Jun	40.44	1,846	3,905	5,751	80,473	12,612	105,894	982	3,928
05-Jun	40.64	1,414 [e]	5,368	6,782	87,255	13,912	119,806	1,408	5,632
06-Jun	40.93	1,414 [e]	8,104	9,518	96,773	12,585	132,391	1,486	5,944
07-Jun	41.27	170	7,368 [f]	7,538	104,311	12,263	144,654	1,808	7,232
08-Jun	41.38	548	6,403	6,951	111,262	14,350	159,004	1,557	6,228
09-Jun	41.83	634	3,877	4,511	115,773	13,691	172,695	706	2,824
10-Jun	41.85	1,102	6,618	7,720	123,493	13,132	185,827	1,896	7,584
11-Jun	41.91	1,904	8,129	10,033	133,526	12,601	198,427	2,401	9,604
12-Jun	41.94	1,848	8,887	10,735	144,261	11,709	210,136	2,190	8,760
13-Jun	42.10	701	8,950	9,651	153,912	10,253	220,390	2,504	10,016
14-Jun	42.30	554	6,658	7,212	161,124	9,729	230,119	1,362	5,448
15-Jun	42.43	376	7,730	8,106	169,230	10,526	240,645	1,819	7,276
16-Jun	42.43	289	6,299	6,588	175,818	9,456	250,101	1,609	6,436
17-Jun	42.34	216	6,710	6,926	182,744	9,395	259,495	1,199	4,796
18-Jun	42.17	524	10,078	10,602	193,346	8,086	267,581	1,501	6,004
19-Jun	42.07	391	13,625	14,016	207,362	7,313	274,895	2,350	9,400
20-Jun	42.03	431	12,102	12,533	219,895	7,630	282,524	2,134	8,536
21-Jun	41.90	470	12,323	12,793	232,688	6,905	289,429	2,861	11,444
22-Jun	41.68	609	16,181	16,790	249,478	7,144	296,574	2,837	11,348
23-Jun	41.49	557	18,212	18,769	268,247	7,544	304,118	3,620	14,480
24-Jun	41.50	665	15,164	15,829	284,076	7,400	311,518	4,289	17,156
25-Jun	41.74	871	15,289	16,160	300,236	7,308	318,826	3,250	13,000
26-Jun	42.11	618	8,792	9,410	309,646	6,696	325,521	2,297	9,188
27-Jun	42.39	315	10,972	11,287	320,933	6,597	332,118	2,314	9,256
28-Jun	42.74	320	13,137	13,457	334,390	6,354	338,472	2,809	11,236
29-Jun	43.07	658	12,851	13,509	347,899	7,008	345,479	3,654	14,616
30-Jun	43.35	256	7,712	7,968	355,867	7,070	352,549	1,950	7,800
01-Jul	43.39	230	10,118	10,348	366,215	7,641	360,190	1,566	6,264

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Appendix B.8. (page 2 of 2)

Date	Water Level [a]	North Bank	Estimate South Bank	Daily	Cumulative	Escapement Objective Daily	Escapement Objective Cumulative	0600 Count	Projected Daily
02-Jul	43.39	319	10,027	10,346	376,561	8,358	368,548	2,476	9,904
03-Jul	43.41	412	10,589	11,001	387,562	9,339	377,886	1,984	7,936
04-Jul	43.42	271	12,948	13,219	400,781	10,185	388,072	2,811	11,244
05-Jul	43.43	215	10,142	10,357	411,138	11,087	399,159	2,296	9,184
06-Jul	43.49	202	8,390	8,592	419,730	10,669	409,828	2,508	10,032
07-Jul	43.41	296	7,948	8,244	427,974	10,738	420,566	2,032	8,128
08-Jul	43.37	428	8,126	8,554	436,528	13,090	433,656	1,791	7,164
09-Jul	43.41	772	8,492	9,264	445,792	14,004	447,660	2,018	8,072
10-Jul	43.40	939	10,460	11,399	457,191	14,013	461,673	2,809	11,236
11-Jul	43.31	672	11,625	12,297	469,488	13,964	475,637	2,143	8,572
12-Jul	43.10	399	10,295	10,694	480,182	15,513	491,150	2,822	11,288
13-Jul	42.96	499	8,682	9,181	489,363	14,638	505,788	1,563	6,252
14-Jul	43.03	524	8,809	9,333	498,696	14,700	520,488	2,793	11,172
15-Jul	42.99	271	6,428	6,699	505,395	14,107	534,595	1,675	6,700
16-Jul	42.99	739	5,839	6,578	511,973	16,366	550,961	1,331	5,324
17-Jul	43.17	548	6,531	7,079	519,052	15,241	566,202	1,949	7,796
18-Jul	43.31	502	4,855	5,357	524,409	14,196	580,398	1,624	6,496
19-Jul	43.37	332	4,659	4,991	529,400	15,510	595,908	752	3,008
20-Jul	43.29	425	5,482	5,907	535,307	17,102	613,010	1,168	4,672
21-Jul	43.12	227	6,731	6,958	542,265	13,512	626,522	1,541	6,164
22-Jul	43.04	196	3,488	3,684	545,949	12,263	638,785	855	3,420
23-Jul	42.84	151	3,378	3,529	549,478	12,488	651,273	1,067	4,268
24-Jul	42.80	394	3,847	4,241	553,719	11,902	663,175	823	3,292
25-Jul	42.69	177	5,478	5,655	559,374	10,496	673,671	790	3,160
26-Jul	42.57	553	6,064	6,617	565,991	9,794	683,464	1,377	5,508
27-Jul	42.55	297	4,720	5,017	571,008	8,789	692,253	1,346	5,384
28-Jul	42.59	310	2,711	3,021	574,029	8,131	700,384	795	3,180
29-Jul	42.69	172	1,912	2,084	576,113	7,003	707,387	593	2,372
30-Jul	42.49	154	2,451	2,605	578,718	7,139	714,526	680	2,720
31-Jul	42.52	266	1,989	2,255	580,973	6,669	721,195	528	2,112
01-Aug	42.26	347	1,906	2,253	583,226	6,392	727,587	435	1,740
02-Aug	42.26	363 [g]	1,961	2,324	585,550	6,081	733,668	613	2,452
03-Aug	42.28		1,947 [h]	1,947	587,497	5,476	739,145	349	1,396
04-Aug	42.42				587,497	4,317	743,462		
05-Aug					587,497	3,990	747,452		

[a] Meters above sea level.

[b] South bank tripod was deployed on tripod at 0800.

[c] Extrapolated using 49% of south bank counts.

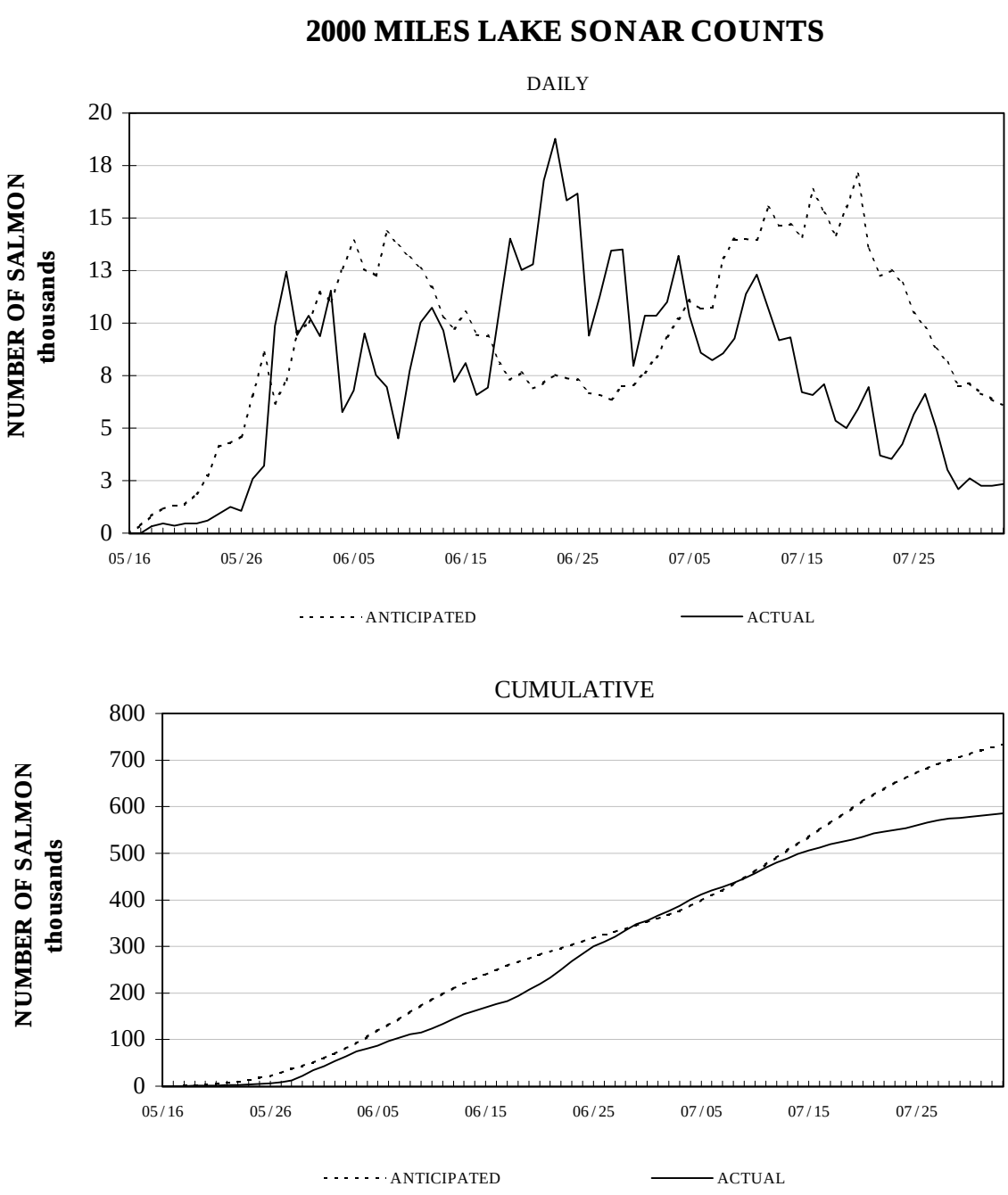
[d] North bank tripod was deployed at 0900.

[e] Interpolated from 3 days before and after.

[f] South bank transducer was deployed on permanent substrate at 1100.

[g] North bank tripod was pulled at 2400.

[h] South bank transducer pulled at 2400.



Appendix B.9. Anticipated versus actual daily and cumulative salmon escapement, Miles Lake sonar, 2000.

Appendix B.10. Aerial escapement indices by date and location for sockeye salmon returning to the Copper River Delta, 2000.

Copper River Delta [a]		Aerial Escapement Indices by Survey Date						
System and Drainage	Survey System	June 6	June 13	June 23	June 30	July 7	July 20	July 27
Eyak River	Eyak River	15	450	1,400	790	1,600	2,500 *	1,200
	West Shore Beaches	0	400	350	1,300	900	1,000 *	1,730
	East Shore Beaches	0	100	5,000	5,000 *	2,300	1,600	500
	Middle Arm Beaches [b]	600	900	2,800	3,000 *	5,000	3,300	4,900
	North Shore Beaches	0	100	1,000	9,000 *	5,000	4,300	500
	Hatchery Creek Delta	0	30	250	450	1,800	2,000 *	600
	Hatchery Creek	0	50	900	120	800	800 *	800
	Power Creek Delta	0	0	1,200	1,300	4,700 *	2,000	300
	Power Creek	0	0	130	300	2,000 *	2,500	3,000
Ibek Creek	Ibek Creek	NS	NS	NS	NS	0	0	0
Alaganik Slough	Alaganik Slough	NS	NS	NS	0	0	0	0
	McKinley Lake	NS	NS	80	300	2,200	2,850 *	1,320
	Salmon Creek West Fork	NS	NS	0	0	250	1,500	2,900
	Salmon Creek East Fork	NS	NS	0	0	0	1,220	1,320
26/27 Mile Creek	26/27 Mile Creek	0	300	2,800	3,300 *	2,200	1,900	1,800
39 Mile Creek	39 Mile Creek	NS	NS	NS	50	1,200	3,000 +	3,800
Goat Mountain	Goat Mountain Creek	NS	NS	NS	NC	0	0	0
Pleasant Creek	Pleasant Creek	NS	NS	NS	950	2,300 *	0	30
Martin River	Martin River - Lower	200	460	1,310	1,280	3,720 *	1,430	730
	Ragged Point River	NS	NS	NS	0	0	0	0
	Ragged Point Lake Outlet	NS	NS	NS	NS	0	0	0
	Ragged Point Lake	NS	NS	NS	NS	NS	0	15
	Martin River - Upper [b]	600	120	300	1,000	350 *	200	30
	Martin Lake Outlet	200	0	1,200	600	900 *	50	50
	Martin Lake	600	400	9,700	18,000	18,800 *	2,900	950
	Martin Lake Feeders	NS	NS	50	2,000	3,200 *	6,000	6,800
	Pothole River	NS	NS	NS	100	350	600	160
	Pothole Lake	NS	NS	NS	0	0	100	500
	Little Martin River	0	0	20	380	200	130	0
	Little Martin Lake	0	0	0	10	200	100	200
Tokun	Tokun Springs	0	2	0	0	25	120	0
	Tokun River	5	65	35	55	140	450	370
	Tokun Lake Outlet	0	0	500	1,900	1,200	1,900	1,200
	Tokun Lake	0	0	83	700	300	300	4,700
Martin River Slough	Martin River Slough	0	0	4,300	7,000	9,300 *	5,200	3,550
Copper River Aerial Survey Daily Total		2,220	3,377	33,408	58,885	70,935	49,950	43,955
Anticipated Escapement		**3,341**	**8,518**	**20,202**	**26,362**	**43,273**	**52,299**	**53,033**

-Continued-

Appendix B.10. (page 2 of 4)

Copper River Delta [a] System and Drainage	Survey System	Aerial Escapement Indices by Survey Date					
		Aug.10	Aug.17	Aug. 23	Aug. 31	Sept. 7	Oct. 2
Eyak River	Eyak River	450	1,000	1,550	190	0	0
	West Shore Beaches	2,950	1,800	1,500	525	1,225	200
	East Shore Beaches	1,000	2,500	1,400	1,100	600	500
	Middle Arm Beaches [b]	3,250	3,000	5,200	4,300	5,000	300
	North Shore Beaches	280	3,080	0	250	200	0
	Hatchery Creek Delta	1,200	180	550	700	100	0
	Hatchery Creek	200	800	100	30	350	20
	Power Creek Delta	40	800	550	700	100	0
	Power Creek	1,200	300	1,070	120	300	100
Ibek Creek	Ibek Creek	105	40	80	0	0	80
Alaganik Slough	Alaganik Slough	0	0	0	0	0	0
	McKinley Lake	500	280	550	300	220	30
	Salmon Creek West Fork	1,500	2,500	1,000	1,800	600	0
	Salmon Creek East Fork	2,000	700	1,300	120	0	0
26/27 Mile Creek	26/27 Mile Creek	1,300	1,030	500	440	70	0
39 Mile Creek	39 Mile Creek	6,300 +	6,500 *	6,400	6,000	3,500	100
Goat Mountain	Goat Mountain Creek	0	0	0	0	0	0
Pleasant Creek	Pleasant Creek	0	0	0	0	0	0
Martin River	Martin River - Lower	480	0	10	700	0	0
	Ragged Point River	310	650	300	390 *	0	0
	Ragged Point Lake Outlet	250	400	1,500	200 *	40	0
	Ragged Point Lake	800	1,000	1,800	3,600 *	2,000	1,500
	Martin River - Upper [b]	150	500	100	650	0	0
	Martin Lake Outlet	600	100	0	80	0	0
	Martin Lake	880	500	1,030	120	0	500
	Martin Lake Feeders	800	120	10	0	25	0
	Pothole River	50 *	0	20	0	0	0
	Pothole Lake	3,000 *	700	300	450	2,100	1,350
	Little Martin River	0	0	0	0	0	0
	Little Martin Lake	700 *	700	320	280	120	0
Tokun	Tokun Springs	215	190	20	150	0	0
	Tokun River	310	1,100	200	100	300	0
	Tokun Lake Outlet	80	0	150	0	0	0
	Tokun Lake	2,600	2,100	1,200	5,100	5,000	1,920
Martin River Slough	Martin River Slough	1,030	280	30	0	0	0
Copper River Aerial Survey Daily Total		34,530	32,850	28,740	28,395	21,850	6,600
Anticipated Escapement		**45,383**	**45,237**	**42,363**	**32,951**	**30,744**	**7,656**

-Continued-

Appendix B.10. (page 3 of 4)

Copper River Delta [b] System and Drainage	Survey System	Estimated Escapement Site [c]	System [e]	**Anticipated**
Eyak River	Eyak River	2,500	30,000	14,500
	West Shore Beaches	1,000		
	East Shore Beaches	5,000		
	Middle Arm Beaches [b]	3,000		
	North Shore Beaches	9,000		
	Hatchery Creek Delta	2,000		
	Hatchery Creek	800		
	Power Creek Delta	4,700		
	Power Creek	2,000		
Ibek Creek	Ibek Creek	-		
Alaganik Slough	Alaganik Slough	0	7,070	13,800
	McKinley Lake	2,850		
	Salmon Creek W Fork	2,900		
	Salmon Creek E Fork	1,320		
26/27 Mile Creek	26/27 Mile Creek	3,300	3,300	3,650
39 Mile Creek	39 Mile Creek	6,500	+ 6,500	9,400
Goat Mountain	Goat Mountain Creek	-	+ 60	1,000
Pleasant Creek	Pleasant Creek	2,300	2,300	950
Martin River	Martin River - Lower	2,300	33,030	29,800
	Ragged Point River	300		
	Ragged Point Outlet	1,500		
	Ragged Point Lake	1,800		
	Martin River - Upper [b]	350		
	Martin Lake Outlet	900		
	Martin Lake	18,800		
	Martin Lake Feeders	3,200		
	Pothole River	50		
	Pothole Lake	3,000		
	Little Martin River	130		
	Little Martin Lake	700		
Tokun	Tokun Springs	215	6,485	9,350
	Tokun River	370		
	Tokun Lake Outlet	1,200		
	Tokun Lake	4,700		
Martin River Slough	Martin River Slough	9,300	9,300	6,600
Copper River Aerial Survey Daily Total			98,045	
Anticipated Escapement Index				**89,050**

-Continued-

[a] The survey sites represent most of the known sockeye salmon spawning locations in the Copper River Delta drainage. Weather permitting, the sites are surveyed weekly. The surveys provide information about the relative strength of escapement among years and within a year, time for spawning sites and relative escapement strength among sites. The indices are not intended to provide an actual estimate of escapement for coastal stocks, but have been used for that purpose in the absence of any other escapement estimating method. The abbreviations used in the table have the following meaning: NS = no survey, NC = surveyed but no count due to poor conditions. The + sign after some counts indicates that the count is the minimum estimate seen in less than ideal conditions. The symbol * indicates that this survey count was used as the peak survey for the site without duplication of counts for survey sites along migratory corridors (see footnote b).

[b] The sites typically have very protracted run timing or two temporally segregated spawning populations at the same sites. Aerial counts from more then one day may be astricted and used in the escapement estimate if the surveyor indicates that these counts represented different fish.

[c] The escapement estimates for each site is in the astricted survey estimate. Where the survey site is a terminal spawning area, the peak count is used. However, if the site is a schooling area for migratory fish bound for sites further upstream, the count which minimizes possible duplicate of counts across dates is selected.

[d] This stream is not included in the estimated escapement delta wide, it is a non-index stream.

[e] The sum of the estimates by site within a system.

Appendix B.11. Copper River and Bering River area sockeye salmon escapement estimates, 1992 - 2000.

Stream / Lake [a,b]	1992	1993	1994	1995	1996	1997	1998	1999	2000
Eyak Lake	21,470	16,400	18,040	17,720	16,110	[d]	16,300	18,100	20,500
Hatchery Creek	2,200	1,100	2,800	3,700	1,900	[d]	3,300	200	2,800
Power Creek	1,420	700	500	650	1,200	[d]	1,500	1,400	6,700
Ibek Creek	40	[d]	800	[d]	100	[d]	[d]	50	[d]
McKinley Lake	10,300	7,700	12,700	13,100	8,600	8,500	11,300	400	2,850
Salmon Creek	25	3,000	420	200	2,600	3,100	3,300	7,100	4,220
26/27 Mile Creek	1,420	1,625	4,900	2,000	1,440	1,700	1,800	3,800	3,300
39 Mile Creek	4,500	4,000	7,000	5,400	6,200	9,300	11,500	12,000	6,500
Goat Mountain	620	[d]	600	650	1,000	350	300	60	60
Pleasant Creek	1,567	2,270	1,400	1,600	1,400	5,000	1,000	7,615	2,300
Martin River	1,400	1,500	4,700	1,500	2,700	1,100	2,700	2,800	2,650
Ragged Pt. R. / Lake	2,600	1,325	0	6,200	1,540	4,400	4,800	5,900	3,600
Martin Lake	14,000	6,700	13,100	9,450	9,000	13,100	13,600	19,150	22,900
Pothole Lake	1,300	700	950	1,200	1,160	300	1,500	2,100	3,050
L. Martin Lake	1,780	1,900	1,760	2,500	300	470	750	1,800	830
Tokun Lake / River	8,230	3,400	2,850	7,150	7,150	5,750	8,950	7,600	6,485
Martin River Slough	3,955	5,400	5,850	3,350	3,070	4,000	4,900	10,900	9,300
Copper Delta Total	76,827	57,720	78,370	76,370	65,470	57,070	87,500	100,975	98,045
Upper Copper R. [c]	601,952	833,387	715,577	599,265	906,239	1,148,079	866,957	850,951	587,497
Copper R. Dist. Tot.	678,779	891,107	793,947	675,635	971,709	1,205,149	954,457	951,926	685,542
Bering River / Lake	54,180	23,120	23,000	28,650	22,420	[d]	21,600	39,030	21,050
Shepherd Creek	1,200	3,100	1,400	2,600	2,000	1,400	[d]	1,215	950
Stillwater Cr.	150	500	800	900	1,100	700	400	950	320
Kushtaka Lake	100	205	150	400	990	65	500	1,100	700
Katalla River	265	800	1,200	900	800	700	900	3,900	1,200
Bering R. Area Tot.	55,895	27,725	26,550	33,450	27,310	2,865	23,400	46,195	24,220
Copper / Bering Total	734,674	918,832	820,497	709,085	999,019	1,208,014	977,857	998,121	709,762

[a] The escapement figures in this table are based on peak aerial survey estimates and sonar counts from a majority of known salmon spawning areas in the Copper and Bering River Delta.These indices are not intended to provide a true estimate of total escapement for the coastal stocks, but a comparable index based upon the best data currently available. An effort has been made to standardize the estimates across years.

[b] The areas in this table represent combined survey sites corresponding to the "system" designations for the current year survey results presented elsewhere in this report.

[c] Upriver escapement estimate from Miles Lake sonar counts.

[d] Peak escapement estimates were not possible for these systems due to poor weather conditions.

Appendix B.12. Aerial survey indices of chinook salmon escapement to the upper Copper River, 1991 - 2000.

Location [a]	Yearly Survey Indices										10 Year Average 1985-1994
	1991	1992 [b]	1993	1994	1995 [b]	1996	1997	1998	1999	2000	
East Fork Chistochina	865			508		2,050	2,245	740	82	580	582
Gulkana River	1,303		1,156	1,682		2,321	2,250	1,407	1,012	1,990	1,384
Mendeltna Creek	305		126	121		370	350	280	38	125	127
Kiana Creek	520		65	430		723	455	700	216	154	260
St. Anne Creek	115			250		117	900	515	486	70	107
Manker Creek	101			75		192	466	828	69	50	103
Grayling Creek	151			2		164	330	527	88	91	94
Little Tonsina River	54			4		45	55	NC	93	24	137
Indian River	18			47		207	270	48	2	61	18
Total Survey Index	2,567		1,347	2,611	0	4,139	5,076	4,305	2,004	2,565	2,812

[a] The escapement figures in this table are based on peak aerial survey estimates and weir counts from a majority of the known spawning areas in the upper Copper River drainage. These indices are not intended to provide a true estimate of total escapement for these stocks, but a comparable index based upon the best data currently available. An effort has been made to standardize the estimate across years, however counts were obtained only as environmental conditions allowed and may not necessarily correspond to periods of peak abundance. Missing counts are generally a result of bad weather, high water or other factors that prevent surveys for that given year.

[b] Surveys were not conducted due to poor weather conditions and are not comparable.

Appendix B.13. Aerial survey indices of sockeye salmon escapement to the upper Copper River drainage, 1991 - 2000.

	Year survey Indices										10 Year
Location [a]	1991	1992	1993 [c]	1994 [c]	1995 [c]	1996	1997	1998	1999	2000	Average 1983-92
Fish Lake	4,350	4,250				4,800		4,900	1,880	5,000	6,418
Bad Crossing 1&2	2,625	500				780		7,800	195	19	2,604
Suslota Lake	210	1,350				4,100		1,060	0	3,000	1,416
Dickey Lake	56	46				0		350	11	0	115
Keg Creek	95	630				850	420	160	125	0	725
Mahlo Creek	3,750	250				3,800	11,800	12,300	325	1,000	2,648
St. Anne Creek	4,700	450				3,500	4,800	4,100	1,300	1,100	4,888
Fish Cr.-Mentasta	1,050	480				400		1,400	450	800	963
Swede Lake	110	875				20		770	270	135	531
Tana River	750	740									1,345
Mentasta Lake	1,550	600				2,800		6,100	715	1,200	3,277
Tanada Lake	1,725	2,250		6,270	3,100				350	3,200	3,849
Salmon Creek	350	1,500							0	500	825
Paxson Inlt-Mud Cr	4,800	6,450				16,800		15,200	5,700	2,200	6,560
Mud Creek and Lake	100	425				240			20	30	172
Mendeltna Creek	3,050	1,750				1,250	400		120	2,800	2,470
Paxson Lake Outlet	2,300	950						200	1,800	1,000	2,661
Mud Cr.- Summit L.	9,625	3,800						700	820	140	7,445
Long Lake	[b]	1,050									1,577
Tonsina Lake	[b]	1,350									1,080
Totals	41,196	29,696									51,569

a The escapement figures in this table are based on peak aerial survey estimates and weir counts from a majority of the known spawning areas in the upper Copper River drainage. These indices are not intended to provide a true estimate of total escapement for these stocks, but a comparable index based upon the best data currently available. An effort has been made to standardize the estimate across years, however counts were obtained only as environmental conditions allowed and may not necessarliy correspond to periods of peak abundance. Missing counts are generally a result of bad weather, high water or other factors that prevent surveys for that given year.

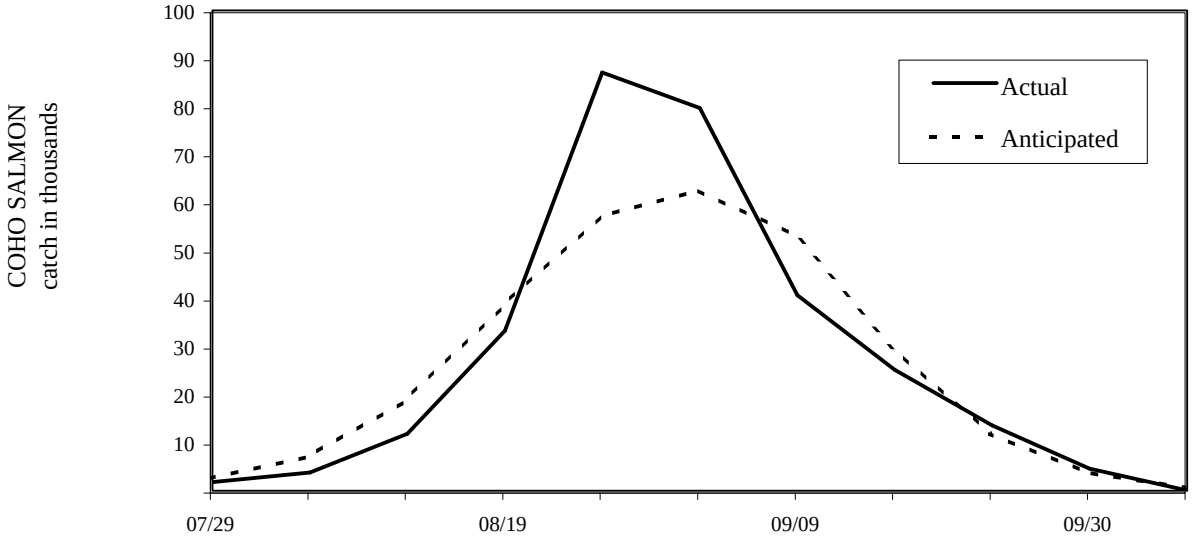
b No survey flown.

c The Tanada Lake system was the only system surveyed in 1994 and 1995, no surveys were flown in 1993.

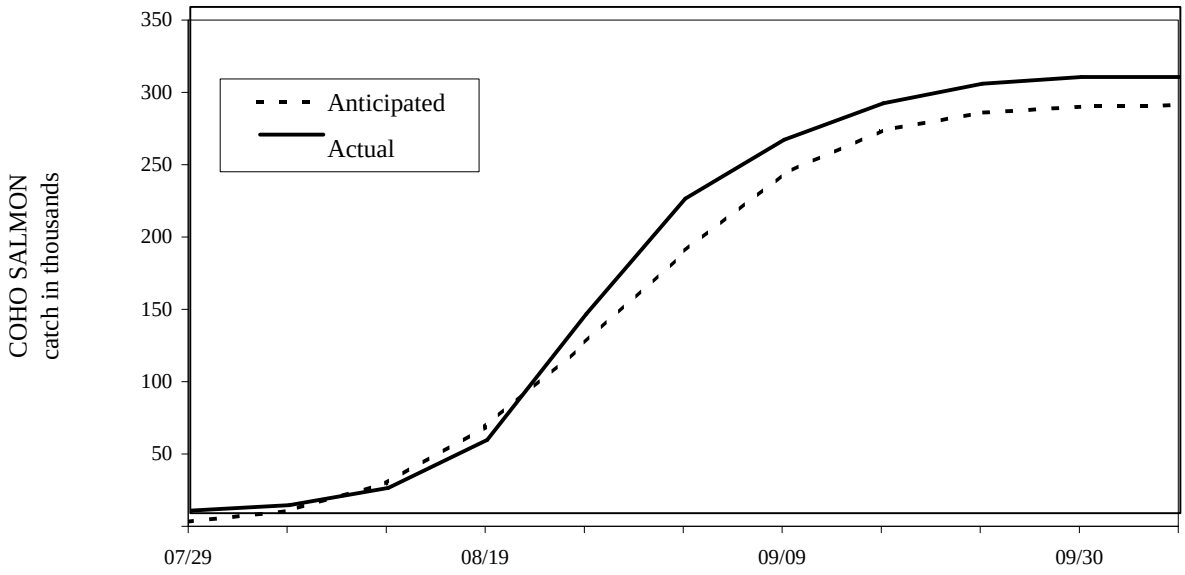
d In 1999, only two survey rounds were flown on July 23&24, and on August 6&7.

d In 2000, two or three survey rounds were flown for each system.

COPPER RIVER DISTRICT COHO SALMON WEEKLY COMMERCIAL HARVEST



COPPER RIVER DISTRICT COHO SALMON CUMULATIVE COMMERCIAL HARVEST



Appendix B.14. Anticipated versus actual weekly and cumulative harvest of coho salmon in the Copper River drift gillnet fishery, 2000.

Appendix B.15. Aerial escapement indices by date and location for coho salmon returning to the Copper River Delta, 2000.

Copper River Delta [a] System and Drainage	Survey System	Aerial Escapement Indices by Survey Date [b] August 10	August 17	August 23	August 31	Sept. 7	Oct. 2
Eyak River	Eyak River	20	1,500	1,550	1,900	3,000	2,000
	East Shore Beaches	0	0	0	0	0	30
	West Shore Beaches	0	0	0	100	0	0
	Middle Arm Beaches	0	0	0	0	1,000	100
	North Shore Beaches	0	90	0	0	200	0
	Hatchery Creek Delta	50	180	600	100	100	900
	Hatchery Creek	0	0	0	0	0	1,000
	Power Creek Delta	0	30	600	300	100	500
	Power Creek	0	0	0	100	20	950
Ibek Creek	Ibek Creek	0	0	110	40	150	7,000
Scott River	Scott River [c]	10	NC	10	0	NC	300
	Elsner Lake [c]	0	0	0	0	30	0
	Scott Lake [c]	0	120	30	200 *	0	0
Alaganik Slough	Alaganik Slough	0	20	0	30	400 *	20
	18/20 Mile Creek	0	0	6	125	272	420
	McKinley Lake	0	0	0	10	120 *	0
	Salmon Creek West Fork	0	0	0	0	40	2,300
	Salmon Creek East Fork	0	0	0	0	0	300
26/27 Mile Creek	26/27 Mile Creek	0	80	0	0	200	1,000
39 Mile Creek	39 Mile Creek	0	500	1,000	1,000	1,000	5,000
Goat Mountain Cr.	Goat Mountain Creek	0	30	0	150	0	430
Pleasant Creek	Pleasant Creek [c]	0	0	0	45	6	2
Martin River	Martin River - Lower	30	1,330	1,090	3,600 *	2,000	150
	Ragged Point River	0	100	300	300 *	0	0
	Ragged Point Lake Outlet	0	30 *	0	0	0	0
	Ragged Point Lake	0	0	0	0	0	0
	Martin River - Upper	0	370	600	530 *	2,500	800
	Martin Lake Outlet	0	800 *	400	30	0	200
	Martin Lake	0	500 *	0	780	0	0
	Martin Lake Feeders	0	50 *	0	0	30	0
	Pothole River	0	0	0	45 *	40	20
	Pothole Lake	0	200 *	0	0	0	0
	Little Martin River	0	220	0	10	3,000 *	3,000
	Little Martin Lake	0	0	0	0	0	0
	Tokun Springs	0	20	20	60	0	330
	Tokun River	0	50	75	20	0	130
	Tokun Lake Outlet	0	0	20	0	0 *	0
	Tokun Lake	0	0	0	250	250 *	0
Martin River Slough	Martin River Slough	0	120	160	4,440	4,200	10,600
Copper River Aerial Survey Daily Total		110	6,340	6,571	14,165	18,658	37,482
Anticipated Escapement [d]		**3,442**	**9,606**	**16,047**	**25,387**	**35,411**	**35,009**

-continued-

Copper River Delta [a]		Estimated Escapement		
System and Drainage	Survey System	Site [d]	System [e]	**Anticipated**
Eyak River	Eyak River	2,000	5,480	**6,100**
	East Shore Beaches	30		
	West Shore Beaches	0		
	Middle Arm Beaches	100		
	North Shore Beaches	0		
	Hatchery Creek Delta	900		
	Hatchery Creek	1,000		
	Power Creek Delta	500		
	Power Creek	950		
Ibek Creek	Ibek Creek	7,000	7,000	**6,600**
Scott River	Scott River `	300		
	Elsner Lake `	0		
	Scott Lake`	200		
Alaganik Slough	Alaganik Slough	400	3,540	**3,500**
	18/20 Mile Creek	420		
	McKinley Lake	120		
	Salmon Creek West Fork	2,300		
	Salmon Creek East Fork	300		
26/27 Mile Creek	26/27 Mile Creek	1,000	1,000	**400**
39 Mile Creek	39 Mile Creek	5,000	5,000	**3,800**
Goat Mountain Cr.	Goat Mountain Creek	430	430	**1,350**
Pleasant Creek	Pleasant Creek `	45		
Martin River	Martin River - Lower	2,000	4,500	**5,700**
	Ragged Point River	300	330	**1,200**
	Ragged Point Lake Outlet	30		
	Ragged Point Lake	0		
	Martin River - Upper	2,500		
	Martin Lake Outlet	800	1,350	**1,950**
	Martin Lake	500		
	Martin Lake Feeders	50		
	Pothole River	45	245	**2,350**
	Pothole Lake	200		
	Little Martin River	3,000	3,000	**6,000**
	Little Martin Lake	0		
	Tokun Springs	330	710	**1,100**
	Tokun River	130		
	Tokun Lake Outlet	0		
	Tokun Lake	250		
Martin River Slough	Martin River Slough	10,600	10,600	**9,200**
Copper River Aerial Survey Total			43,185	
Anticipated Escapement [b]				**49,250**

-continued-

[a] The survey sites represent most of the known coho salmon spawning locations in the Copper River Delta drainage. Weather permitting, the sites are surveyed weekly. The surveys provide information about the relative strength of escapement among years and within a year, time for spawning sites and relative escapement strength among sites. The indices are not intended to provide an actual estimate of escapement for coastal stocks but have been used for that purpose in the absence of any other escapement estimating method. The abbreviations used in the following table have the following meaning: NS = no survey, NC = surveyed but no count due to poor conditions. A + sign after a count indicates that the count is a minimum estimate, made in less than ideal conditions. The symbol * indicates that this survey count was used as the peak survey for the site.

[b] For systems not flown on any given survey the expected for that system was subtracted from the total anticipated.

[c] This stream is not included in the estimated escapement delta wide, it is a non-index stream.

[d] The escapement estimates for each site is in the astricted survey estimate. Where the survey site is a terminal spawning area the peak count is used. However, if the site is a schooling area for migratory fish bound for sites further upstream, the count which minimizes possible duplication of counts across dates is selected.

[e] The sum of the estimates by site within the index systems.

Appendix B.16. Copper River Delta and Bering River coho salmon escapement estimates, 1991 - 2000.

Stream / Lake [a,b]	1991	1992	1993	1994	1995	1996	1997	1998 [e]	1999	2000
Eyak Lake	7,170	5,710	NC [d]	9,900	4,050	5,100	6,800		1,250	2,130
Hatchery Creek	0	1,100	NC [d]	700	170	0	1,400		300	1,900
Power Creek	0	1,000	NC [d]	700	300	0	2,700		2,700	1,450
Ibek Creek	13,540	9,600	NC [d]	3,060	3,000	6,300	4,700		4,600	7,000
Scott & Elsner River [c]	700	550	1,580	1,600	540	1,000	2,200		2,500	300
18 / 20 Mile	4,200	915	1,750	3,300	2,550	3,800	3,300		610	420
McKinley Lake	100	800	700	2,100	400	NC [d]	1,100		50	120
Salmon Creek	1,770	0	1,400	0	1,250	1,500	2,500		3,080	2,600
26 / 27 Mile	300	475	1,500	1,300	1,300	1,480	2,300		2,610	1,000
39 Mile	2,100	1,900	1,600	4,150	3,800	5,250	6,100		3,650	5,000
Goat Mountain	1,900	480	650	1,000	2,800	1,000	1,400		650	430
Pleasant Cr. [c]	6	8	NS	45	100	40	620		1,220	45
Martin River	1,600	1,900	4,540	10,600	5,000	15,400	NC [d]		3,900	4,500
Ragged Pt. River / Lk.	450	310	300	0	100	0	80		275	330
Martin Lake	1,500	65	150	0	10	0	NC [d]		600	1,350
Pothole Lake	6,000	300	730	0	300	140	60		600	245
Little Martin Lake	11,360	10,800	6,400	200	1,500	700	10,500		3,600	3,000
Tokun River / Lake	2,800	510	950	1,780	1,900	1,300	1,300		1,130	710
Martin River Slough	8,860	8,140	11,200	5,120	5,950	4,100	10,500		12,900	10,600
Copper Delta Total	64,356	44,563	33,450	45,555	35,020	47,110	57,560		46,225	43,130
Katalla R.	4,000	2,760	4,400	4,500	4,500	6,800	8,000		3,000	2,800
Bering Lake	12,300	3,540	5,900	5,800	10,600	6,000	14,800		13,800	10,370
Dick Creek	1,220	1,250	200	100	100	0	1,300		1,270	2,500
Shepherd Cr.	NS	NS	600	900	800	NC [d]	NC [d]		200	450
Nichawak R.	2,560	1,970	4,100	2,000	2,700	2,000	4,300		4,800	4,300
Gandil R.	1,460	600	1,250	950	1,350	1,000	1,900		3,000	600
Controller Bay	9,760	6,180	13,600	14,300	7,400	11,000	12,100		5,220	5,360
Bering Area Total	31,300	16,300	30,050	28,550	27,450	26,800	42,400		31,290	26,380
Copper / Bering Total	95,656	60,863	63,500	74,105	62,470	73,910	99,960		77,515	69,510

[a] The escapement figures in this table are based on peak aerial survey estimates counts from a majority of the known salmon spawning areas in the Copper and Bering River Delta. These indices are not intended to provide a true estimate of total escapement for the coastal stocks, but a comparable index based upon the best data currently available. An effort has been made to standardize the estimates across years, however counts were obtained only as environmental conditions allowed and may not necessarily correspond to periods of peak abundance. Missing counts are generally a result of bad weather, high water, turbulence or other factors that prevent surveys for that given year.

[b] The areas in this table represent combined survey sites corresponding to the "system" designations for the current year survey results presented elsewhere in this report.

[c] Not an indexed stream.

[d] Due poor stream or weather conditions these systems are listed as "NC" no count. See Appendix B.15. for weekly observations.

[e] Due to weather conditions and timing of surveys no peak estimate was possible.

Appendix B.17 Estimated age and sex composition of sockeye salmon harvested in the Copper River District commercial common property drift gillnet fishery, 2000.

		Brood Year and Age Class									
		1997	1996		1995			1994		1993	
		0.2	0.3	1.2	0.4	1.3	2.2	1.4	2.3	2.4	Total
Strata Combined:	5/15 - 10/2										
Sampling dates:	5/16 - 7/15										
Sample size:	3,333										
Female	Percentage of sample	0.0	2.0	2.0	0.1	36.2	0.3	0.3	2.9	0.0	43.9
	Number in catch	354	17,844	17,801	489	318,866	2,416	2,915	25,716	219	386,620
Male	Percentage of sample	0.3	2.5	4.1	0.1	44.3	0.5	0.4	3.8	0.0	56.1
	Number in catch	2,828	22,247	36,441	1,249	390,314	3,977	3,295	33,093	0	493,444
Total	Percentage of sample	0.4	4.6	6.2	0.2	80.6	0.7	0.7	6.7	0.0	100.0
	Number in catch	3,183	40,091	54,241	1,738	709,180	6,393	6,210	59,079	219	880,334
	Standard error	927	3,064	3,770	659	5,931	1,313	1,247	3,587	219	

Appendix B.18 Estimated age and sex composition of chinook salmon harvested in the Copper River District commercial common property drift gillnet fishery, 2000.

		Brood Year and Age Class								
		1996	1995		1994		1993		1992	
		1.2	1.3	2.2	1.4	2.3	1.5	2.4	1.6	Total
Strata Combined: 5/15 - 8/29										
Sampling dates: 5/15 - 6/6										
Sample size: 1,830										
Female	Percentage of sample	2.2	43.7	0.1	10.0	0.5	0.1	0.2	0.0	56.7
	Number in catch	686	13,650	23	3,137	164	18	53	0	17,732
Male	Percentage of sample	3.8	25.6	0.3	12.6	0.4	0.2	0.2	0.0	43.2
	Number in catch	1,182	7,998	95	3,952	129	55	75	11	13,497
Total	Percentage of sample	6.0	69.3	0.4	22.7	0.9	0.2	0.4	0.0	100.0
	Number in catch	1,868	21,664	118	7,103	293	74	128	11	31,259
	Standard error	179	343	49	310	73	37	41	11	

Appendix B.19 Estimated age and sex composition of coho salmon harvested in the Copper River District commercial common property drift gillnet fishery, 2000.

		Brood Year and Age Class			
		1997	1996	1995	
		1.1	2.1	3.1	Total
Strata Combined:	05/15 - 10/08				
Sampling dates:	08/15 - 09/06				
Sample size:	1,253				
Female	Percentage of sample	16.2	28.2	0.3	44.7
	Number in catch	49,304	85,972	912	136,187
Male	Percentage of sample	22.5	32.2	0.6	55.3
	Number in catch	68,704	98,278	1,775	168,757
Total	Percentage of sample	38.7	60.4	0.9	100.0
	Number in catch	118,008	184,249	2,687	304,944
	Standard error	4,675	4,690	779	

Appendix B.20. Commercial salmon catch by species in the Bering River District, 1973 - 2000.

	Catch by Species					
Year	Chinook	Sockeye	Coho	Pink	Chum	Total
1973	285	15,426	65,348	2	5	81,066
1974	32	4,208	28,615	7	2	32,864
1975	162	21,637	24,162	0	0	45,961
1976	228	30,908	42,423	43	1	73,603
1977	127	14,445	47,218	192	221	62,203
1978	331	33,554	91,097	266	2,391	127,639
1979	385	139,015	114,046	6,895	23,094	283,435
1980 [a]	0	0	108,872	0	0	108,872
1981	200	55,585	82,626	9,882	8,307	156,600
1982	254	129,667	144,752	47	333	275,053
1983	610	179,273	117,669	851	4,615	303,018
1984	330	91,784	214,632	309	20,408	327,463
1985	215	26,561	419,276	214	9,642	455,908
1986	128	19,038	115,809	15	243	135,233
1987	34	16,926	15,864	54	7	32,885
1988	19	7,152	86,539	23	181	93,914
1989	30	9,225	26,952	7	2	36,216
1990	14	8,332	42,952	2	1	51,301
1991	28	19,181	110,951	4	195	130,359
1992	21	19,721	125,616	4	1	145,363
1993	130	33,951	115,833	82	22	150,018
1994	121	27,926	259,003	34	63	287,147
1995	44	21,585	282,045	26	229	303,929
1996	111	37,712	93,763	0	30	131,616
1997	23	9,651	97	2	0	9,773
1998	70	8,439	12,284	5	2	20,800
1999	42	13,697	9,852	204	96	23,891
2000	5	1,279	56,329	0	0	57,613
Ten Year Average (1990-99)	60	20,020	105,240	36	64	125,420

[a] In 1980 no fishing was allowed prior to August 11.

Appendix B.21. Commercial salmon harvest by period in the Bering River District drift gillnet fishery, 2000.

					Chinook		Sockeye		Coho		Pink		Chum	
Period	Date [a]	Hours	Permits	Landings	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
01	06/26-06/27	24	3	4	3	84	821	4,921	0	0	0	0	0	0
05	07/10-07/11	36	1	1	0	0	317	2,218	0	0	0	0	0	0
06	07/13-07/15	36	1	1	1	12	128	900	0	0	0	0	0	0
11	08/28-08/29	36	26	51	0	0	4	25	6,748	62,157	0	0	0	0
12	09/04-09/05	36	26	71	0	0	4	28	9,709	95,964	0	0	0	0
13	09/11-09/12	36	39	90	0	0	3	18	19,455	179,140	0	0	0	0
14	09/18-09/19	36	47	87	0	0	1	6	15,607	148,200	0	0	0	0
15	09/25-09/26	36	22	37	1	8	0	0	4,080	40,575	0	0	0	0
16	10/02-10/03	36	5	6	0	0	1	6	730	7,321	0	0	0	0
Total			69	348	5	104	1,279	8,122	56,329	533,357				
Average Weight						20.80		6.35		9.47				

[a] For starting times of specific openings refer to Appendix B.26.

Appendix B.22. Aerial escapement indices by date and location for sockeye salmon returning to the Bering River Delta, 2000.

Bering River Delta [a] System and Drainage	Survey System	June 6	June 13	June 23	June 30	July7	July 20
Bering River	Bering River	620	360	4,800	1,900	350	1,100
	Bering Lake	0	0	4,000	3,090	8,300	7,200
	Dick Creek	0	0	0	3,104	8,600	10,000
	Shepherd Creek - Lagoon	0	NS	0	100	200	200
	Shepherd Creek	NS	NS	NS	300	130	50
	Carbon Creek	NS	NS	NS	NS	NS	0
	Clear Creek	NS	NS	NS	NS	NS	30
	Kushtaka Lake	NS	NS	NS	NS	NS	0
	Shockum Creek	NS	NS	NS	NS	NS	0
Katalla River [b]	Katalla River	0	0	0	180	680	1,200
Bering River Aerial Survey Daily Index		620	360	8,800	8,674	18,260	19,780
Anticipated Escapement Index [c]		**746**	**6,045**	**7,479**	**12,503**	**23,541**	**23,342**

Bering River Delta [a] System and Drainage	Survey System	July 27	August 10	August 17	August 23	August 31	Sept. 7
Bering River	Bering River	90 *	0	0	0	0	0
	Bering Lake	7,360 *	600	550	800	0	600
	Dick Creek	13,600 *	5,300	4,700	3,900	980	10
	Shepherd Creek - Lagoon	50 *	0	0	0	0	0
	Shepherd Creek	220	300	30	150	0	0
	Carbon Creek	10	330	2	90	12	200
	Clear Creek	320 *	320	25	65	0	0
	Kushtaka Lake	220	400 *	0	2	280	NS
	Shockum Creek	0	300 *	300	0	50	NS
Katalla River [b]	Katalla River	675	90	30	20	30	0
Bering River Aerial Survey Daily Index		22,545	7,640	5,637	5,027	1,352	810
Anticipated Escapement Index [c]		**22,744**	**10,447**	**5,932**	**4,029**	**1,479**	**1,006**

-continued-

Appendix B.22 (page 2 of 2).

Bering River Delta [a]		Aerial Escapement Indices by Survey Date				
System and Drainage	Survey System	Oct. 2		Site [d]	System [f]	Anticipated
	Bering River	0		90	21,050	**23,512**
	Bering Lake	300		7,360		
	Dick Creek	0		13,600		
	Shepherd Creek - Lagoon	0		50	950	**6,045**
	Shepherd Creek	300	*	300		
	Carbon Creek	600	*	600		
	Clear Creek	0		320	320	**1,585**
	Kushtaka Lake	0		400	700	**1,693**
	Shockum Creek	0		300		
Katalla River [b]	Katalla River	0		1,200	1,200	
Bering River Aerial Survey Daily Index		1,200			22,070	**32,835**
Anticipated Escapement Index [c]		**0**				

[a] The survey sites represent most of the known sockeye salmon spawning locations in the Bering River drainage. Weather permitting, the sites are surveyed weekly. The surveys provide information about the relative strength of escapement among years and within a year, time for spawning sites and relative escapement strength among sites. The indices are not intended to provide an actual estimate of escapement for coastal stocks but have been used for that purpose in the absence of any other escapement estimating method. The abbrevations used in the following table have the following meaning: NS = no survey, NC = surveyed but no count due to poor conditions. The + sign after some counts indicates that the count is the minimum estimate seen in less than ideal conditions. The symbol * indicates that this survey count was used as the peak survey for the site without duplication of counts for survey sites along migratory corridors (see footnote d).

[b] This stream is not included in the estimated escapement delta wide, it is a non-index stream.

[c] For systems not flown on any given survey the expected for that system was subtracted from the total anticipated for that survey.

[d] The escapement estimates for each site is in the astricted survey estimate. Where the survey site is a terminal spawning area the peak count is used. However, if the site is a schooling area for migratory fish bound for sites further upstream, the count which minimizes possible duplication of counts across dates is selected.

[e] Due to poor weather conditions during peak of run, no estimate was possible.

[f] The sum of the estimates by site within a system.

Appendix B.23. Anticipated and actual weekly catch and escapement of coho salmon in the Bering River District drift gillnet fishery, 2000.

Week Ending Date	Fishing Time (Hrs.)	Coho Catch		Coho Escapement	
		Actual Catch	Anticipated Catch[a]	Actual Aerial Index	Anticipated Index[b]
12-Aug	24			0	1,161
19-Aug	24		3,069	56	5,469
26-Aug	36		17,560	881	8,687
2-Sep	36	6,748	33,667	8,829	17,693
9-Sep	36	9,709	35,808	10,055	18,742
16-Sep	36	19,455	22,499	NS	18,478
23-Sep	36	15,607	6,154	NS	14,990
30-Sep	36	4,080	1,037	NS	7,861
7-Oct	36	730	143	18,660	4,247
Season Total		56,329	119,937	18,660	22,117

[a] Based on average historic catches for comparable dates (1969-1996).

[b] Based on average historic aerial escapement surveys for comparable dates (1984 - 1992).

Appendix B.24. Aerial escapement indices by date and location for coho salmon returning to the Bering River Delta, 2000.

Bering River Delta [a]		Aerial Escapement Indices by Survey Date					
System and Drainage	Survey System	August 10	August 17	August 23	August 31	Sept. 7	Oct.2
Bering River	Bering River [b]	0	0	0	710	670	0
	Bering Lake	0	50	110	940	4,150	9,700
	Dick Creek	0	0	0	500	660	2,500
Shepherd Drainage [c]	Shepherd Creek - Lagoo	0	0	0	100	0	0
	Shepherd Creek	0	0	0	350	80	0
	Carbon Creek	0	0	0	0	0	0
Katalla River	Katalla River	0	0	300	2,800	740	1,000
Lower Bering River	Gandil River	0	5	2	15	145	600
	Nichawak River	0	0	0	220	10	4,300
Controller Bay	Campbell River	NS	0	0	0	370	30
	Edwardes River	NS	1	450	1,404	3,200	130
	Okalee River	NS	0	19	1,790	30	400
	Other Clear Streams	NS	0	0	0	0	0
Bering River Aerial Survey Daily Index		0	56	881	8,829	10,055	18,660
Anticipated Aerial Index [d]		**1,161**	**5,469**	**8,687**	**17,693**	**18,742**	**4,247**

Bering River Delta [a]		Estimated Escapement		
System and Drainage	Survey System	Site [e]	System [f]	
Bering River	Bering River [b]	670	12,870	**6,128**
	Bering Lake	9,700		
	Dick Creek	2,500		
Shepherd Drainage [c]	Shepherd Creek - Lagoo	100	450	
	Shepherd Creek	350		
	Carbon Creek	0		
Katalla River	Katalla River	2,800	2,800	**5,800**
Lower Bering River	Gandil River	600	4,900	**9,105**
	Nichawak River	4,300		
Controller Bay	Campbell River	370	5,360	**3,206**
	Edwardes River	3,200		
	Okalee River	1,790		
	Other Clear Streams	0		
Bering River/Controller Bay Aerial Survey Total			26,380	
Anticipated Aerial Index				**24,239**

[a] The survey sites represent most of the known coho salmon spawning locations in the Bering River drainage. Wea sites are surveyed weekly. The surveys provide information about the relative strength of escapement among yea time for spawning sites and relative escapement strength among sites. The indices are not intended to provide ar escapement for coastal stocks but have been used for that purpose in the absence of any other escapement estima abbreviations used in the following table have the following meaning: NS = no survey, NC = surveyed but no co conditions. The + sign after some counts indicates that the count is the minimum estimate seen in less than ideal The symbol * indicates that this survey count was used as the peak survey for the site without duplication of cou along migratory corridors (see footnote e).

[b] Bering River counts include coho observed in the Don Miller Hill tributaries.

[c] This stream is not included in the estimated escapement delta wide, it is a non-index stream.

[d] Systems not flown on a survey, the expected for that system was subtracted from the total anticipated.

[e] The escapement estimates for each site is in the astricted survey estimate. Where the survey site is a terminal sp count is used. However, if the site is a schooling area for migratory fish bound for sites further upstream, the co possible duplication of counts across dates is selected.

[f] The sum of the estimates by site within a system

Appendix B.25 Estimated age and sex composition of coho salmon harvested in the Bering River District commercial common property drift gillnet fishery, 2000.

		Brood Year and Age Class			
		1997	1996	1995	
		1.1	2.1	3.1	Total
Strata Combined	08/21 - 09/14				
Sampling dates:	08/23 - 09/14				
Sample size:	800				
Female	Percentage of sample	9.5	27.6	2.2	39.3
	Number in catch	5,348	15,531	1,255	22,133
Male	Percentage of sample	17.6	41.9	1.1	60.6
	Number in catch	9,902	23,614	628	34,145
Total	Percentage of sample	27.1	69.6	3.3	100.0
	Number in catch	15,249	39,196	1,884	56,329
	Standard error	923	956	387	

Appendix B.26. Summary of periods and emergency orders issued for the commercial salmon gillnet fisheries in the Bering and Copper River Districts, 2000.

Bering River District (200)			Copper River District (212)			
Periods	Dates	Hours Fished	Periods[a]	Dates	Hours Fished	Emergency Orders Issued
			01	05/15	12	2-F-E-01-00[b]
			02	05/19	12	2-F-E-03-00[b]
			03	05/22	12	2-F-E-04-00
			04	05/29	6	2-F-E-06-00[c]
			05	06/01	12	2-F-E-07-00
			06	06/05	12	2-F-E-09-00
						2-F-E-13-00
			07	06/23	12	2-F-E-21-00
01	06/26-06/27	24	08	06/26-06/27	24	2-F-E-22-00
02	06/29-06/30	24	09	06/29-06/30	24	2-F-E-24-00
03	07/03-07/04	36	10	07/03-07/04	36	2-F-E-25-00
04	07/06-07/08	36	11	07/06-07/08	36	2-F-E-35-00
05	07/10-07/11	36	12	07/10-07/11	36	2-F-E-36-00
06	07/13-07/15	36	13	07/13-07/15	36	2-F-E-37-00
07	07/17-07/18	36	14	07/17-07/18	36	2-F-E-39-00
08	07/20-07/21	24	15	07/20-07/21	24	2-F-E-40-00
			16	07/24	12	2-F-E-43-00
			17	07/28	12	2-F-E-44-00
			18	07/31	12	2-F-E-58-00
			19	08/04	12	2-F-E-58-00
09	08/07-08/08	24	20	08/07-08/08	24	2-F-E-60-00
10	08/14-08/15	24	21	08/14-08/15	24	2-F-E-61-00
11	08/21-08/22	36	22	08/21-08/22	36	2-F-E-64-00
12	08/28-08/29	36	23	08/28-08/29	36	2-F-E-72-00
13	09/04-09/05	36	24	09/04-09/05	36	2-F-E-75-00
14	09/11-09/12	36	25	09/11-09/12	36	2-F-E-83-00
15	09/18-09/19	36	26	09/18-09/19	36	2-F-E-85-00
16	09/25-09/26	36	27	09/25-09/26	36	2-F-E-87-00
17	10/02-10/03	36	28	10/02-10/03	36	2-F-E-90-00[d]

[a] The Copper River schedule is typically two 24-hour periods per week; from 7:00 a.m. Monday to 7:00 a Tuesday and from 7:00 p.m Thursday to 7:00 p.m. Friday. All 12-hours periods began at 7:00 a.m.

[b] The following waters were closed to commercial fishing during the 12-hour period on May 15 and May 1 The waters inside of a line from the Steamboat marker to the U.S.C.G. light on the west side of Pete Dah entrance to the ADF&G marker located on the east side of Pete Dahl entrance and from the U.S.C.G. light on the west side of Grass Island entrance to the ADF&G marker located on the east side of Grass I entrance and from the U.S.C.G light on the west side of Kokenhinik Island entrance to the ADF&G mar located on the east side of Kokenhenik Island entrance and all waters west of the ADF&G marker at Coffee Creek.

[c] Fishing period began at 8:00 a.m. and ended at 2:00 p.m.

[d] The Copper and Bering River Districts closed for the 2000 season effective 7:00 p.m. Sunday, October 8

APPENDIX C: COGHILL AND UNAKWIK DISTRICTS

Appendix C.1. Commercial salmon harvest by period in the Coghill District drift gillnet and purse seine fisheries, Prince William Sound, 2000.

					Chinook		Sockeye		Coho		Pink		Chum	
Period	Date [a]	Hours	Permits	Landings	Numbers	Pounds	Numbers	Pounds	Numbers	Pounds	Numbers	Pounds	Numbers	Pounds
DRIFT GILLNET														
01	06/01	24	7	15	4	77	27	179	0	0	0	0	9,293	74,232
02	06/05	24	64	151	17	319	130	833	0	0	0	0	95,476	761,839
03	06/09	24	278	641	60	857	454	2,929	0	0	0	0	212,014	1,701,966
04	06/12	24	317	841	36	632	1,103	7,510	1	6	289	984	255,981	2,043,331
05	06/15	24	380	973	32	499	3,848	26,125	3	26	2	9	249,847	1,963,933
06	06/19	24	353	766	18	301	14,237	102,184	10	68	9	34	154,622	1,243,309
07	06/23	24	186	462	15	215	32,195	230,672	2	14	33	138	79,879	637,996
08	06/26	24	167	383	4	62	15,952	112,060	8	61	369	1,340	101,982	796,584
09	06/29	24	199	497	8	181	34,119	250,473	38	254	1,520	5,344	99,152	783,183
10	07/03	24	223	490	15	147	28,186	204,773	74	608	6,291	20,832	79,948	634,285
11	07/06	48	178	577	26	346	21,524	151,504	103	660	8,816	29,369	164,411	1,326,030
12	07/10	48	156	464	14	198	12,053	83,958	209	1,629	14,122	47,144	88,556	717,024
13	07/13	24	106	216	18	194	4,886	33,669	542	3,786	11,940	39,570	31,971	261,240
14	07/17	48	56	111	2	30	4,402	30,299	25	181	10,756	36,480	16,441	133,386
15	07/20	24	29	37	0	0	2,879	18,794	111	880	3,660	11,703	3,828	30,800
18	08/23	12	1	2	0	0	7	47	14	119	3,013	10,228	0	0
20	08/27	12	1	1	0	0	12	79	12	110	639	1,916	4	29
22	08/31	36	4	4	0	0	43	268	258	2,587	3,876	11,632	9	72
23	09/02	36	10	22	0	0	128	803	2,573	25,643	8,674	33,840	239	1,217
24	09/06	36	12	43	0	0	238	1,464	10,172	103,246	13,504	41,520	27	240
25	09/11	36	15	30	0	0	19	102	9,502	95,315	497	1,989	1	10
26	09/14	36	35	124	0	0	7	42	22,333	221,476	218	640	120	1,210
27	09/18	84	31	113	0	0	3	18	24,332	243,696	0	0	0	0
28	09/25	84	20	50	0	0	0	0	12,547	125,692	0	0	0	0
Total		804	239	7,013	269	4,058	176,452	1,258,785	82,869	826,057	88,228	294,712	1,643,801	13,111,916
Average Weight						15.09		7.13		9.97		3.34		7.98
PURSE SEINE														
15	07/21	20	2	2	0	0	4	19	0	0	1,511	5,288	959	7,230
16	08/19	12	39	58	0	0	718	4,525	349	2,901	526,966	1,744,109	85	709
17	08/21	12	35	61	0	0	811	4,782	591	5,253	522,166	1,772,950	67	514
18	08/23	36	42	110	0	0	520	3,183	2,150	18,651	1,023,115	3,465,945	116	930
19	08/24	36	25	57	1	15	300	1,768	5,811	48,837	480,926	1,626,525	45	348
20	08/27	36	22	34	0	0	454	2,690	4,289	35,425	258,937	873,872	43	275
21	08/29	36	16	24	0	0	122	740	2,955	23,247	178,013	562,551	0	0
22	08/31	36	9	18	0	0	24	146	5,184	40,648	170,293	531,999	0	0
23	09/02	84	9	21	0	0	31	222	10,444	85,513	109,387	336,069	23	182
27	09/18	156	1	1	0	0	0	0	218	2,176	0	0	0	0
Total		464	62	386	1	15	2,984	18,075	31,991	262,651	3,271,314	10,919,308	1,338	10,188
Average Weight						15.00		6.06		8.21		3.34		7.61
Combined Total				7,399	270	4,073	179,436	1,276,860	114,860	1,088,708	3,359,542	11,214,020	1,645,139	13,122,104
Average Weight						15.09		7.12		9.48		3.34		7.98

[a] Starting date of period.

Appendix C.2. Commercial salmon catch by species in the Coghill District, Prince William Sound, 1982 - 2000.

	CATCH BY SPECIES					
Year	Chinook	Sockeye	Coho	Pink	Chum	Total
DRIFT GILLNET						
1982	127	929,965	213	181,925	252,077	1,364,307
1983	340	38,273	1,013	233,263	234,022	506,911
1984	396	94,956	563	897,496	264,878	1,258,289
1985	380	339,296	1,131	454,531	246,824	1,042,162
1986	617	381,565	789	68,887	218,971	670,829
1987	352	377,454	13,396	712,897	318,842	1,422,941
1988	501	82,294	41,307	1,314,061	346,388	1,784,551
1989	364	106,114	80,737	628,522	194,584	1,010,321
1990	126	11,988	128,605	1,907,510	301,209	2,349,438
1991	92	3,888	78,363	231,501	34,223	348,067
1992	242	57,919	86,782	167,384	182,433	494,760
1993	576	66,532	37,898	141,279	635,208	881,493
1994	390	12,928	50,879	58,334	554,181	676,712
1995	468	57,797	29,343	161,493	379,659	628,760
1996	575	177,530	20,926	59,447	612,969	871,447
1997	862	227,231	5,618	154,969	689,977	1,078,657
1998	605	59,463	2,925	383,604	347,317	793,914
1999	401	106,028	1,114	32,408	689,210	829,161
2000	269	176,452	82,869	88,228	1,643,801	1,991,619
Ten Year Average (1990-99)	434	78,130	44,245	329,793	442,639	895,241
PURSE SEINE						
1982	23	17,466	29	1,006,579	135,553	1,159,650
1983	0	175	16	41,048	8,958	50,197
1984	0	21	0	10,911	1,126	12,058
1985	85	10,757	112	69,242	19,330	99,526
1986	186	18,514	98	145,706	27,078	191,582
1987	58	38,899	1,956	865,671	59,252	965,836
1988	63	1,623	15,787	1,600,481	11,755	1,629,709
1989	61	2,030	39,484	3,296,965	124,639	3,463,179
1990	2	286	11,819	785,278	10,951	808,336
1991	11	1,562	621	1,980,074	11,519	1,993,787
1992	6	765	27,382	196,503	1,603	226,259
1993	46	6,250	1,760	352,468	3,645	364,169
1994	50	21,060	30,517	3,538,760	3,575	3,593,962
1995	33	20,670	5,337	917,200	2,597	945,837
1996	1	2,640	5,319	1,484,422	463	1,492,845
1997	7	5,694	1,269	1,875,617	33,139	1,915,726
1998	20	1,702	1,531	2,845,157	21,600	2,870,010
1999	34	3,229	338	3,509,722	621,349	4,134,672
2000	1	2,984	31,991	3,271,314	1,338	3,307,628
Ten Year Average (1990-99)	21	6,386	8,589	1,748,520	71,044	1,834,560
COMBINED GEARS						
1982	150	947,431	242	1,188,504	387,630	2,523,957
1983	340	38,448	1,029	274,311	242,980	557,108
1984	396	94,977	563	908,407	266,004	1,270,347
1985	465	350,053	1,243	523,773	266,154	1,141,688
1986	803	400,079	887	214,593	246,049	862,411
1987	410	416,353	15,352	1,578,568	378,094	2,388,777
1988	564	83,917	57,094	2,914,542	358,143	3,414,260
1989	425	108,144	120,221	3,925,487	319,223	4,473,500
1990	128	12,274	140,424	2,692,788	312,160	3,157,774
1991	103	5,450	78,984	2,211,575	45,742	2,341,854
1992	248	58,684	114,164	363,887	184,036	721,019
1993	622	72,782	39,658	493,747	638,853	1,245,662
1994	440	33,988	81,396	3,597,094	557,756	4,270,674
1995	501	78,467	34,680	1,078,693	382,256	1,574,597
1996	576	180,170	26,245	1,543,869	613,432	2,364,292
1997	869	232,925	6,887	2,030,586	723,116	2,994,383
1998	625	61,165	4,456	3,228,761	368,917	3,663,924
1999	435	109,257	1,452	3,542,130	1,310,559	4,963,833
2000	270	179,436	114,860	3,359,542	1,645,139	5,299,247
Ten Year Average (1990-99)	455	84,516	52,835	2,078,313	513,683	2,729,801

Appendix C.3. Daily salmon escapement through the Coghill River weir, Prince William Sound, 2000.

	Sockeye		Pink[b]				Coho		Chinook	
Date	Daily	Cum.	Daily	Cum.	Daily	Cum.	Daily	Cum.	Daily	Cum.
06/14	0	0	0	0	0	0	0	0	0	0
06/15	0	0	0	0	0	0	0	0	0	0
06/16	0	0	0	0	0	0	0	0	0	0
06/17	40	40	0	0	0	0	0	0	0	0
06/18	8	48	0	0	0	0	0	0	0	0
06/19	26	74	0	0	0	0	0	0	0	0
06/20	55	129	0	0	0	0	0	0	0	0
06/21	41	170	0	0	0	0	0	0	0	0
06/22	26	196	0	0	0	0	0	0	0	0
06/23	267	463	0	0	0	0	0	0	0	0
06/24	1,026	1,489	0	0	0	0	0	0	0	0
06/25	425	1,914	0	0	0	0	0	0	0	0
06/26	397	2,311	0	0	0	0	0	0	0	0
06/27	902	3,213	0	0	0	0	0	0	0	0
06/28	193	3,406	0	0	0	0	0	0	0	0
06/29	90	3,496	0	0	0	0	0	0	0	0
06/30	477	3,973	0	0	0	0	0	0	0	0
07/01	1,977	5,950	0	0	1	1	0	0	0	0
07/02	125	6,075	0	0	0	1	0	0	0	0
07/03	2,164	8,239	0	0	3	4	0	0	0	0
07/04	1,235	9,474	2	2	0	4	0	0	1	1
07/05	1,703	11,177	0	2	3	7	0	0	0	1
07/06	1,346	12,523	4	6	0	7	0	0	0	1
07/07	504	13,027	3	9	2	9	0	0	0	1
07/08	1,190	14,217	11	20	4	13	0	0	0	1
07/09	1,025	15,242	48	68	3	16	0	0	1	2
07/10	559	15,801	15	83	4	20	0	0	0	2
07/11	450	16,251	125	208	4	24	0	0	1	3
07/12	962	17,213	136	344	3	27	0	0	0	3
07/13	837	18,050	432	776	5	32	0	0	0	3
07/14	101	18,151	11	787	0	32	0	0	1	4
07/15	194	18,345	19	806	0	32	0	0	0	4
07/16	1,010	19,355	392	1,198	3	35	0	0	1	5
07/17	1,014	20,369	442	1,640	4	39	0	0	1	6
07/18	737	21,106	504	2,144	4	43	0	0	0	6
07/19	962	22,068	514	2,658	6	49	0	0	0	6
07/20	954	23,022	668	3,326	9	58	0	0	0	6
07/21	1,172	24,194	2,526	5,852	11	69	1	1	0	6
07/22	790	24,984	1,338	7,190	21	90	2	3	0	6
07/23	423	25,407	500	7,690	0	90	0	3	0	6
07/24	508	25,915	462	8,152	7	97	1	4	0	6
07/25	149	26,064	115	8,267	3	100	0	4	0	6
07/26	218	26,282	151	8,418	0	100	2	6	0	6
07/27	681	26,963	912	9,330	21	121	0	6	1	7
07/28	955	27,918	7,454	16,784	34	155	1	7	2	9
07/29	"	27,918	"	16,784	"	155	"	7	0	9
07/30	"	27,918	"	16,784	"	155	"	7	0	9
07/31	"	27,918	"	16,784	"	155	"	7	0	9
08/01	"	27,918	"	16,784	"	155	"	7	0	9
08/02	"	27,918	"	16,784	"	155	"	7	0	9
08/03	"	27,918	"	16,784	"	155	"	7	0	9
08/04	"	27,918	"	16,784	"	155	"	7	0	9
08/05	"	27,918	"	16,784	"	155	"	7	0	9
08/06	6	27,924	8	16,792	0	155	0	7	0	9
08/07	32	27,956	188	16,980	4	159	4	11	0	9

-continued-

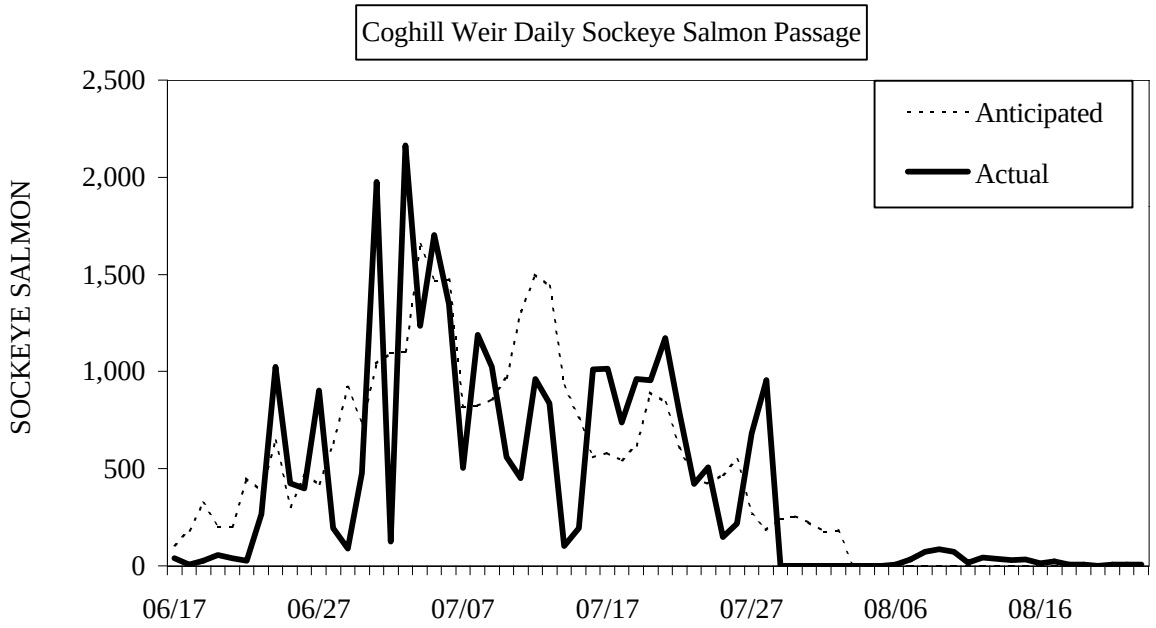
Appendix C.3. (page 2 of 2)

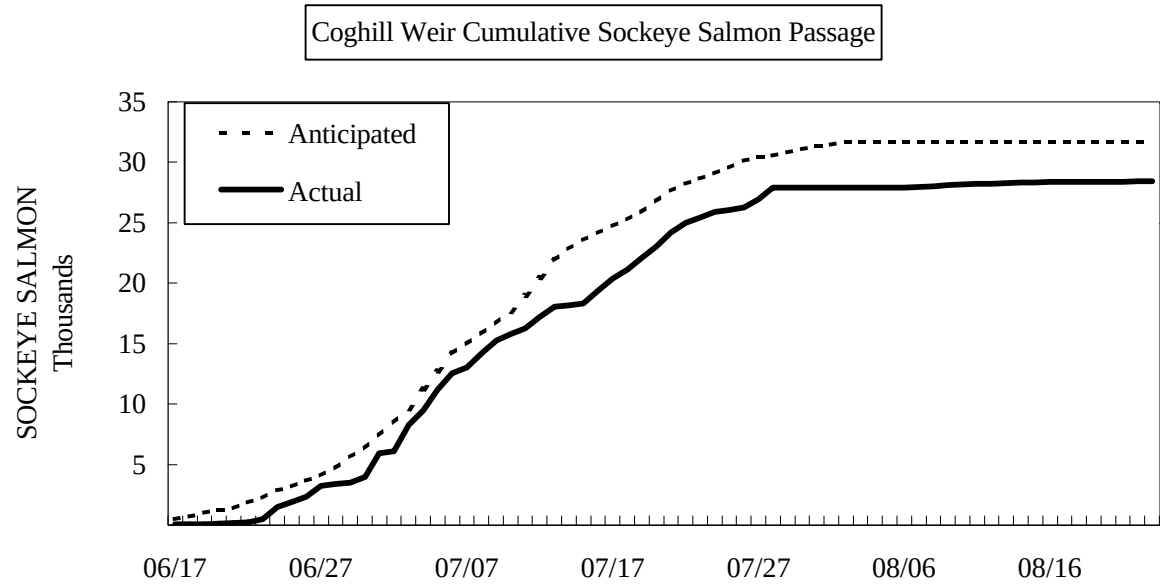
	Sockeye		Pink[υ]		Chum		Coho		Chinook	
Date	Daily	Cum.	Daily	Cum.	Daily	Cum.	Daily	Cum.	Daily	Cum.
08/08	73	28,029	0	16,980	1	160	15	26	0	9
08/09	86	28,115	149	17,129	5	165	10	36	0	9
08/10	72	28,187	182	17,311	1	166	26	62	0	9
08/11	18	28,205	78	17,389	4	170	8	70	0	9
08/12	43	28,248	208	17,597	7	177	11	81	0	9
08/13	36	28,284	599	18,196	1	178	11	92	0	9
08/14	28	28,312	1,748	19,944	4	182	40	132	0	9
08/15	33	28,345	3,025	22,969	4	186	61	193	0	9
08/16	12	28,357	0	22,969	1	187	14	207	0	9
08/17	22	28,379	0	22,969	7	194	18	225	0	9
08/18	8	28,387	0	22,969	0	194	10	235	0	9
08/19	5	28,392	674	23,643	2	196	21	256	0	9
08/20	1	28,393	81	23,724	0	196	0	256	0	9
08/21	7	28,400	261	23,985	3	199	7	263	0	9
08/22	8	28,408	450	24,435	2	201	20	283	0	9
08/23	8	28,416	1,907	26,342	5	206	44	327	2	11
08/24	5	28,421	334	26,676	13	219	14	341	0	11
08/25	2	28,423	975	27,651	7	226	31	372	0	11
08/26	1	28,424	318	27,969	4	230	14	386	0	11
08/27	4	28,428	1,026	28,995	8	238	11	397	0	11
08/28	3	28,431	671	29,666	1	239	21	418	0	11
08/29	1	28,432	0	29,666	1	240	2	420	0	11
08/30	1	28,433	0	29,666	0	240	37	457	0	11
08/31	1	28,434	0	29,666	1	241	24	481	0	11
09/01	0	28,434	0	29,666	1	242	4	485	0	11
09/02	1	28,435	0	29,666	1	243	11	496	0	11
09/03	0	28,435	57	29,723	1	244	12	508	0	11
09/04	3	28,438	105	29,828	1	245	26	534	0	11
09/05	0	28,438	0	29,828	0	245	6	540	0	11
09/06	0	28,438	0	29,828	1	246	44	584	0	11
09/07	0	28,438	0	29,828	2	248	7	591	0	11
09/08	1	28,439	0	29,828	2	250	3	594	0	11
09/09	1	28,440	0	29,828	0	250	12	606	0	11
09/10	2	28,442	0	29,828	1	251	4	610	0	11
09/11	0	28,442	0	29,828	0	251	10	620	0	11
09/12	1	28,443	2	29,830	1	252	13	633	0	11
09/13	0	28,443	20	29,850	0	252	34	667	0	11
09/14	0	28,443	3	29,853	0	252	9	676	0	11
09/15	1	28,444	6	29,859	0	252	5	681	0	11
09/16	1	28,445	0	29,859	0	252	5	686	0	11
09/17	0	28,445	0	29,859	2	254	6	692	0	11
09/18	0	28,445	3	29,862	0	254	4	696	0	11
09/19	1	28,446	0	29,862	0	254	7	703	0	11
09/20	0	28,446	0	29,862	1	255	5	708	0	11
09/21	0	28,446	0	29,862	0	255	6	714	0	11
09/22	0	28,446	0	29,862	0	255	7	721	0	11
09/23	0	28,446	0	29,862	0	255	7	728	0	11
09/24	0	28,446	0	29,862	0	255	13	741	0	11
09/25	0	28,446	0	29,862	0	255	1	742	0	11
09/26	0	28,446	0	29,862	0	255	11	753	0	11
09/27	0	28,446	0	29,862	0	255	1	754	0	11
09/28	0	28,446	0	29,862	0	255	6	760	0	11
09/29	0	28,446	0	29,862	0	255	2	762	0	11
09/30	0	28,446	0	29,862	0	255	2	764	0	11
10/01	0	28,446	0	29,862	0	255	1	765	0	11

[ʻ] Weir was pulled due to high water.

[υ] Count may be incomplete. The Coghill weir is designed to prohibit the passage of sockeye salmon, but smaller pink salmon may pass through the weir uncounted.

COGHILL LAKE SOCKEYE SALMON ESCAPEMENT





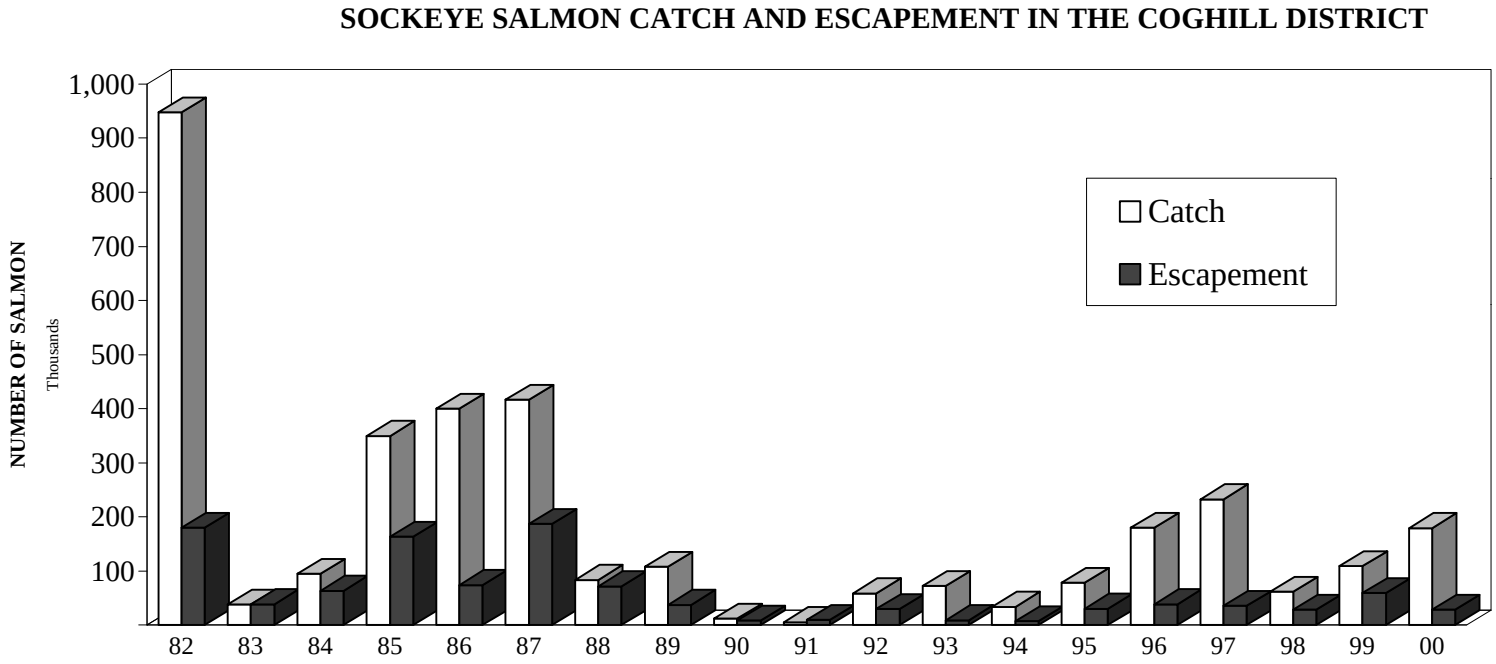
Appendix C.4. Anticipated daily and cumulative sockeye salmon escapement versus actual escapement past the Coghill River weir, Prince William Sound, 2000.

Appendix C.5. Salmon escapement by species in the Coghill District, Prince William Sound, 1970 - 2000.

Year	Sockeye[a]	Pink[b]	Chum[b]
1970	35,200	95,170	11,880
1971	15,000	62,160	6,600
1972	51,000	30,960	28,160
1973	55,000	493,780	72,610
1974	22,333	56,940	29,280
1975	34,855	452,430	3,640
1976	9,056	57,090	25,670
1977	31,562	130,510	43,940
1978	42,284	85,450	18,160
1979	48,281	70,980	6,330
1980	142,253	214,930	23,340
1981	156,112	106,450	2,050
1982	180,314	368,380	22,130
1983	38,783	310,330	61,410
1984	63,622	429,450	19,690
1985	163,311	296,970	22,140
1986	71,095	101,600	13,140
1987	187,263	147,060	24,510
1988	72,052	37,070	39,240
1989	37,751	45,510	22,680
1990	8,949	49,110	26,020
1991	9,752	98,580	6,070
1992	29,642	23,611	10,003
1993	9,232	41,837	8,430
1994	7,264	65,648	14,176
1995	30,382	46,029	11,596
1996	38,693	104,781	19,669
1997	35,517	52,961	3,101
1998	28,923	85,968	22,764
1999	59,311	168,816	5,057
2000	28,446	29,862	255
10 Year Average (1990-1999)	25,767	73,734	12,689

[a] Escapement count of sockeye salmon past the Coghill River weir.

[b] Pink and chum escapements estimated for streams in district by aerial surveys. Historical data revised in 1990.



Appendix C.6. Sockeye salmon catch and escapement in the Coghill District, Prince William Sound, 1982 - 2000.

Appendix C.7 Estimated age and sex composition of sockeye salmon harvested in the Coghill District commercial common property drift gillnet fisheries, 2000.

		Brood Year and Age Class							
		1997	1996		1995		1994		
		0.2	0.3	1.2	1.3	2.2	1.4	2.3	Total
Strata Combined:	06/01 - 10/01								
Sampling dates:	06/21 - 07/13								
Sample size:	1709 a								
Female	Percentage of sample	0.3	0.1	2.3	47.5	0.6	0.0	3.7	54.4
	Number in catch	525	113	4,153	85,196	1,068	0	6,629	97,684
Male	Percentage of sample	0.4	0.0	3.4	38.9	0.5	0.1	2.2	45.5
	Number in catch	797	0	6,030	69,796	871	157	3,989	81,639
Total	Percentage of sample	0.7	0.1	5.7	86.4	1.1	0.1	5.9	100.0
	Number in catch	1,322	113	10,183	155,104	1,938	157	10,618	179,436
	Standard error	433	81	1,149	1,695	467	121	1,197	

[a] Scales with resorbed edges were not included in sample: strata 1 had 1 resorbed scale, strata 2 had 3 resorbed scales, strata 3 had 9 resorbed scales, strata 4 had 14 resorbed scales.

Appendix C.8 Estimated age and sex composition of the sockeye salmon escapements through the weir on the outlet stream of Coghill Lake, 2000.

		Brood Year and Age Class						
		1996		1995		1994		
		1.2	2.1	1.3	2.2	1.4	2.3	Total
Strata Combined:	06/17 - 09/18							
Sampling dates:	07/02 - 07/27							
Sample size:	1,324							
Female	Percentage of sample	8.5	0.0	40.6	0.6	0.1	3.1	53.0
	Number in escapement	2,426	0	11,561	170	25	887	15,068
Male	Percentage of sample	9.1	0.1	35.7	0.5	0.1	1.6	47.0
	Number in escapement	2,579	18	10,157	141	25	458	13,378
Total	Percentage of sample	17.6	0.1	76.3	1.1	0.2	4.7	100.0
	Number in escapement	5,005	18	21,718	311	49	1,345	28,446
	Standard error	299	18	335	78	35	168	

Appendix C.9. Commercial salmon harvest by period in the Unakwik District drift gillnet and purse seine fisheries, Prince William Sound, 2000.

DRIFT GILLNET

					Chinook		Sockeye		Coho		Pink		Chum	
Period	Date [a,b]	Hours	Permits	Landings	Numbers	Pounds	Numbers	Pounds	Numbers	Pounds	Numbers	Pounds	Numbers	Pounds
02	06/23	24	3	3	0	0	567	4,194	0	0	0	0	20	172
03	06/26	24	1	1	0	0	141	1,103	0	0	0	0	0	0
04	06/29	24	1	1	0	0	83	625	0	0	0	0	0	0
05	07/03	24	1	1	0	0	108	883	0	0	0	0	0	0
09	07/17	48	1	1	0	0	220	1,548	0	0	0	0	0	0
Total			7	7			1,119	8,353					20	172
Average Weight								7.46						8.60

PURSE SEINE

					Chinook		Sockeye		Coho		Pink		Chum	
Period	Date [a,b]	Hours	Permits	Landings	Numbers	Pounds	Numbers	Pounds	Numbers	Pounds	Numbers	Pounds	Numbers	Pounds
11	08/19	12	3	3	0	0	0	0	0	0	20,485	69,648	0	0
Total			3	3							20,485	69,648		
Average Weight												3.40		

[a] For area and opening times refer to Appendix C.11.

[b] Starting date of period.

Appendix C.10. Commercial salmon catch by species in the Unakwik District, Prince William Sound, 1981 - 2000.

	CATCH BY SPECIES					
Year	Chinook	Sockeye	Coho	Pink	Chum	Total
DRIFT GILLNET						
1981	0	2,445	0	4,152	1,330	7,927
1982	1	48,947	0	335	598	49,881
1983	3	13,215	0	1,515	1,426	16,159
1984	2	18,522	0	27,742	7,125	53,391
1985	26	27,532	22	9,191	3,942	40,713
1986	5	25,759	1	1,973	2,463	30,201
1987	2	5,894	1	4,871	1,356	12,124
1988	15	8,589	0	281	1,504	10,389
1989	31	21,412	27	41,820	404	63,694
1990	3	247	127	9,986	23	10,386
1991	13	4,482	11	12,299	118	16,923
1992	3	2,224	13	3,972	94	6,306
1993	5	14,691	4	3,338	978	19,016
1994	0	548	0	300	0	848
1995	8	2,116	0	1	36	2,161
1996	3	6,063	0	17	694	6,777
1997	3	3,411	0	0	177	3,591
1998	10	13,651	55	1,932	586	16,234
1999	4	8,544	5	0	296	8,849
2000	0	1119	0	0	20	1139
Ten Year Average (1990-99)	5	5,598	22	3,185	300	9,109
PURSE SEINE						
1981	0	108	0	71,624	17,650	89,382
1982	0	2	4	89,137	517	89,660
1983	0	6	0	3,344	716	4,066
1986[a]						
1985	0	138	0	28,210	4,123	32,471
1986	0	76	0	4,718	4,675	9,469
1987	0	146	0	187,752	6,549	194,447
1988	0	667	7	57,844	23,860	82,378
1989[a]						
1990[a]						
1991	0	819	3	121,068	79	121,969
1992	0	42	2	13,264	119	13,427
1993	0	79	0	3,233	67	3,379
1994	0	226	102	388,901	73	389,302
1995[a]						
1996[a]						
1997[a]						
1998[a]						
1999	1	386	0	0	2	389
2000	0	0	0	20485	0	20485
Ten Year Average (1990-99)	0	310	21	105,293	68	105,693
COMBINED GEARS						
1981	0	2,553	0	75,776	18,980	97,309
1982	1	48,949	4	89,472	1,115	139,541
1983	3	13,221	0	4,859	2,142	20,225
1984	2	18,522	0	27,742	7,125	53,391
1985	26	27,670	22	37,401	8,065	73,184
1986	5	25,835	1	6,691	7,138	39,670
1987	2	6,040	1	192,623	7,905	206,571
1988	15	9,256	7	58,125	25,364	92,767
1989	31	21,412	27	41,820	404	63,694
1990	3	247	127	9,986	23	10,386
1991	13	5,301	14	133,367	197	138,892
1992	3	2,266	15	17,236	213	19,733
1993	5	14,770	4	6,571	1,045	22,395
1994	0	774	102	389,201	73	390,150
1995	8	2,116	0	1	36	2,161
1996	3	6,063	0	17	694	6,777
1997	4	3,797	0	0	179	3,980
1998	10	13,651	55	1,932	586	16,234
1999	5	8,930	5	0	298	9,238
2000	0	1,119	0	20,485	20	21,624
Ten Year Average (1990-99)	5	5,792	32	55,831	334	61,995

[a]No catch recorded.

Appendix C.11. Summary of periods, dates, hours open, and emergency orders issued for the commercial salmon fisheries in the Coghill and Unakwik Districts, Prince William Sound, 2000.

Unakwik (229)					Coghill (223)				
Periods			Hours	Emergency	Periods			Hours	
P/S	GN	Dates	Open	Issued	P/S	GN	Dates	Open	Emergency Orders Issued
						01	06/01-06/02	24	2-F-E-08-00[a]
						02	06/05-06/06	24	2-F-E-09-00[a]
						03	06/09-06/10	24	2-F-E-09-00[a], 2-F-E-10-00[b]
						04	06/12-06/13	24	2-F-E-15-00[b]
						05	06/15-06/16	24	2-F-E-16-00[b]
01	01	06/19-06/20	24	2-F-E-19-00[c]		06	06/19-06/20	24	2-F-E-19-00[b]
02	02	06/23-06/24	24	2-F-E-20-00[c]		07	06/23-06/24	24	2-F-E-20-00[b]
03	03	06/26-06/27	24	2-F-E-23-00[c]		08	06/26-06/27	24	2-F-E-23-00[b]
04	04	06/29-06/30	24	2-F-E-24-00[c]		09	06/29-06/30	24	2-F-E-24-00[b]
05	05	07/03-07/04	24	2-F-E-25-00[c]		10	07/03-07/04	24	2-F-E-25-00[b]
06	06	07/06-07/08	24	2-F-E-35-00[c]		11	07/06-07/07	24	2-F-E-35-00[d]
07	07	07/10-07/12	48	2-F-E-36-00[c]		12	07/10-07/12	48	2-F-E-36-00[d]
08	08	07/13-07/15	48	2-F-E-37-00[c]		13	07/13-07/15	48	2-F-E-37-00[e]
09	09	07/17-07/19	48	2-F-E-39-00[c]		14	07/17-07/19	48	2-F-E-39-00[f]
10	10	07/20-07/21	24	2-F-E-40-00[c]		15	07/20-07/21	24	2-F-E-40-00[g]
					01		07/21	20	2-F-E-40-00[g]
11	11	08/19	12	2-F-E-66-00[c]	02	16	08/19	12	2-F-E-66-00[h]
12	12	08/21	12	2-F-E-67-00[c]	03	17	08/21	12	2-F-E-67-00[h]
					04	18	08/23-08/24	36	2-F-E-68-00[i]
					05	19	08/25-08/26	36	2-F-E-69-00[i]
					06	20	08/27-08/28	36	2-F-E-70-00[i]
					07	21	08/29-08/30	36	2-F-E-71-00[j]
					08	22	08/31-09/01	36	2-F-E-76-00[k]
					09	23	09/02-09/05	84	2-F-E-77-00[k]
					10	24	09/06-09/09	84	2-F-E-78-00[k]
					11	25	09/11-09/12	36	2-F-E-79-00[k]
						26	09/14-09/17	84	2-F-E-80-00[l]
					12	27	09/18-09/24	156	2-F-E-80-00[l], 2-F-E-86-00[m]
					13	28	09/25-10/01	156	2-F-E-86-00[n]
					14	29	10/02-10/08	156	2-F-E-86-00[n]
					15	30	10/09-10/15	148	2-F-E-91-00[o]
					16	31	10/16-10/22	156	2-F-E-91-00[o]

[a] Waters of the Coghill District south of 61° 00.00 N. latitude, excluding the Wally Noerenberg Hatchery (WNH) Terminal Harvest Area (THA) and Special Harvest Area (SHA) were open.

[b] Waters of the Coghill District, excluding the WNH THA and SHA were open.

[c] The entire Unakwik District was open.

[d] Waters of the Coghill District, including the WNH THA and SHA up to a line of bouys in front of the hatchery barrier seine, were open.

[e] Waters of the Coghill District south of 61° 00.00 N. latitude, including the WNH THA and SHA up to a line of bouys in front of the hatchery barrier seine, were open.

[f] Waters of the Esther Subdistrict, including the WNH THA and SHA up to a line of bouys in front of the hatchery barrier seine, were open.

[g] Waters of the Esther Subdistrict, including the WNH THA and SHA up to a line of bouys in front of the hatchery barrier seine, were open. Area opened to purse seine gear at midnight July 21.

[h] Waters of the Coghill District, excluding the WNH THA and SHA and waters inside the yellow Salmon Harvest Task Force (SHTF) markers in Bettles Bay, Hummer Bay, and Pigot Bay, were open.

[i] All waters of the Coghill District, excluding waters of Bettles Bay, Hummer Bay, and Pigot Bay inside the yellow SHTF markers, were open for 12 hours. In addition, waters of the WNH SHA, up to a line of buoys outside the WNH barrier seine and waters of the THA were open for 36 hours.

[j] The waters of the Esther Subdistrict, WNH THA and SHA south of a line of buoys near the barrier were open.

[k] The waters of the Esther Subdistrict and WNH THA were open.

[l] The waters of the Esther Subdistrict and WNH THA were open to drift gillnet gear only.

[m] The waters of the Esther Subdistrict and WNH THA were open. Effective 8:00 a.m. September 21, the area open to commercial fishing was expanded to include the WNH SHA to within 50 feet of the hatchery net pen frames.

[n] The waters of the Esther Subdistrict,WNH THA, and SHA to within 50 feet of the hatchery net pens were open.

[o] Waters of the Esther Subdistrict, including the WNH THA and SHA were open.

APPENDIX D: ESHAMY DISTRICT

Appendix D.1. Commercial salmon harvest by period in the Eshamy District drift gillnet and set gillnet fisheries, Prince William Sound, 2000.

					Chinook		Sockeye		Coho		Pink		Chum	
Period	Date[a,b]	Hours	Permits	Landings	Numbers	Pounds	Numbers	Pounds	Numbers	Pounds	Numbers	Pounds	Numbers	Pounds
DRIFT GILLNET														
01	05/15	36	2	2	0	0	1732	12129	0	0	0	0	0	0
02	05/18	36	6	6	1	15	253	1772	0	0	0	0	2	12
03	05/22	36	3	3	0	0	590	4134	0	0	0	0	1	6
04	05/25	36	3	4	0	0	448	2978	0	0	0	0	53	357
05	05/29	36	1	2	1	18	202	1404	0	0	0	0	17	114
08	06/08	36	2	2	0	0	52	335	0	0	0	0	54	401
09	06/12	36	1	1	0	0	139	798	0	0	0	0	250	1979
10	07/17	24	99	173	593	5,601	27,697	182,593	117	987	6,450	21,559	9,219	73,322
11	07/20	24	177	263	1	16	26,058	171,788	830	6,806	14,475	48,065	6,752	52,401
12	07/24	24	201	340	1	16	28,471	187,950	407	3,441	13,133	43,499	4,141	32,055
13	07/26	64	189	321	1	22	27,824	185,748	788	6,851	19,226	63,693	2,760	21,596
14	07/29	48	43	81	0	0	4,669	31,150	60	488	1,121	4,087	134	1,057
15	07/31	24	168	218	0	0	13,907	91,685	515	4,415	21,671	74,674	1,458	11,213
16	08/01	24	95	105	0	0	5,021	34,099	196	1,687	10,576	36,516	676	5,467
17	08/02	48	52	77	0	0	6,520	45,366	173	1,004	6,025	20,977	128	1,022
18	08/04	24	119	178	0	0	11,830	74,157	499	4,220	23,176	75,912	747	5,871
19	08/05	48	43	63	0	0	5,119	33,357	65	494	2,887	9,647	63	449
20	08/07	48	128	302	1	14	23,354	151,436	304	2,638	47,480	160,203	456	3,691
21	08/09	24	27	32	31	204	2,432	16,556	15	148	1,008	3,434	46	162
22	08/10	48	137	296	2	17	15,659	103,329	326	2,902	57,542	197,483	254	2,060
23	08/12	24	28	36	0	0	1,424	9,439	22	212	2,605	9,286	16	127
24	08/13	24	61	123	0	0	7,995	52,898	140	1,288	30,116	105,993	92	771
25	08/14	32	18	19	0	0	653	4,029	12	103	2,830	10,278	8	67
26	08/17	24	70	133	0	0	7,234	44,789	261	2,370	47,684	167,496	89	757
27	08/21	24	31	53	0	0	7,765	48,221	88	859	24,461	86,045	51	445
28	08/25	24	37	54	2	22	3,381	22,102	195	1,771	24,630	86,956	37	315
29	08/28	24	14	23	0	0	3,016	19,835	122	566	11,143	37,213	3	26
30	08/31	36	7	10	0	0	533	3,155	7	72	6,761	22,546	0	0
31	09/04	24	3	3	0	0	1,107	6,882	110	1,053	250	925	4	31
35	09/25	156	1	1	0	0	0	0	144	1,482	0	0	0	0
Total		1,116	104	2,924	634	5,945	235,085	1,544,114	5,396	45,857	375,250	1,286,487	27,511	215,774
Average Weight						9.38		6.57		8.50		3.43		7.84
SET GILLNET														
01	05/15	36	7	7	0	0	2257	15838	0	0	0	0	43	323
02	05/18	36	9	12	1	27	2943	20612	0	0	0	0	41	309
03	05/22	36	8	15	3	51	1204	8214	0	0	0	0	170	1175
04	05/25	36	9	14	3	67	830	5648	0	0	0	0	92	643
05	0529	36	7	11	8	140	436	2978	0	0	0	0	224	1602
06	06/01	36	5	10	12	235	549	3423	0	0	0	0	171	1357
07	06/05	36	3	5	6	104	449	3033	0	0	0	0	321	2450
08	06/08	36	1	3	0	0	145	985	0	0	0	0	19	137
09	06/12	36	3	4	2	17	193	1146	0	0	0	0	371	2978
10	07/17	24	22	49	0	0	7835	52894	41	272	1725	5608	5459	43453
11	07/20	24	25	44	1	12	7115	47427	8	85	2305	7573	1771	13877
12	07/24	24	25	52	2	23	7368	48642	22	187	2570	8624	1205	9659
13	07/26	64	27	59	0	0	9076	60373	30	263	4122	13521	909	7152
14	07/29	48	12	25	1	18	1705	11708	14	171	236	811	62	507
15	07/31	24	24	55	0	0	5142	32943	89	793	6332	20679	518	4118
16	08/01	24	18	30	0	0	2461	16258	33	303	2042	6771	133	1051
17	08/02	48	16	26	0	0	2347	15578	14	135	2015	7118	69	554
18	08/04	24	20	41	1	14	4131	26755	59	553	5036	16196	267	1976
19	08/05	48	14	26	0	0	2621	17854	22	182	704	2261	14	108
20	08/07	48	24	79	0	0	8386	52985	50	455	11671	38984	181	1489
21	08/09	24	1	1	0	0	184	1290	0	0	91	274	0	0
22	08/10	48	25	65	0	0	6423	40466	20	165	12828	44181	75	619
23	08/12	24	8	9	0	0	1642	11167	16	152	2249	6852	15	115
24	08/13	24	4	6	1	11	1115	7330	1	10	675	2739	4	32
25	08/14	32	21	47	0	0	4634	29821	85	781	18369	63230	82	690
26	08/17	24	21	54	0	0	8503	49326	20	176	19321	68687	47	399
27	08/21	24	16	29	0	0	3944	25157	51	453	18179	58712	49	414
28	08/25	24	16	32	0	0	4974	32552	54	507	15144	51154	3	22
29	08/28	24	7	11	0	0	798	5072	25	238	8134	27695	4	29
30	08/31	36	7	13	0	0	1570	10976	8	89	5260	16907	0	0
33	09/11	150	1	1	0	0	125	818	0	0	0	0	0	0
Total		1,158	21	835	41	719	101,105	659,269	662	5,970	139,008	468,577	12,319	97,238
Average Weight						17.54		6.52		9.02		3.37		7.89

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Appendix D.1. (page 2 of 2)

Period	Date[a,b]	Hours	Permits	Landings	Chinook		Sockeye		Coho		Pink		Chum	
					Numbers	Pounds	Numbers	Pounds	Numbers	Pounds	Numbers	Pounds	Numbers	Pounds
COMBINED GEAR														
01	05/15	36	9	9	0	0	3,989	27,967	0	0	0	0	43	323
02	05/18	36	15	18	2	42	3,196	22,384	0	0	0	0	43	321
03	05/22	36	11	18	3	51	1,794	12,348	0	0	0	0	171	1,181
04	05/25	36	12	18	3	67	1,278	8,626	0	0	0	0	145	1,000
05	0529	36	8	13	9	158	638	4,382	0	0	0	0	241	1,716
06	06/01	36	5	10	12	235	549	3423	0	0	0	0	171	1357
07	06/05	36	3	5	6	104	449	3033	0	0	0	0	321	2450
08	06/08	36	3	5	0	0	197	1,320	0	0	0	0	73	538
09	06/12	36	4	5	2	17	332	1,944	0	0	0	0	621	4,957
10	07/17	24	121	222	593	5,601	35,532	235,487	158	1,259	8,175	27,167	14,678	116,775
11	07/20	24	202	307	2	28	33,173	219,215	838	6,891	16,780	55,638	8,523	66,278
12	07/24	24	226	392	3	39	35,839	236,592	429	3,628	15,703	52,123	5,346	41,714
13	07/26	64	216	380	1	22	36,900	246,121	818	7,114	23,348	77,214	3,669	28,748
14	07/29	48	55	106	1	18	6,374	42,858	74	659	1,357	4,898	196	1,564
15	07/31	24	192	273	0	0	19,049	124,628	604	5,208	28,003	95,353	1,976	15,331
16	08/01	24	113	135	0	0	7,482	50,357	229	1,990	12,618	43,287	809	6,518
17	08/02	48	68	103	0	0	8,867	60,944	187	1,139	8,040	28,095	197	1,576
18	08/04	24	139	219	1	14	15,961	100,912	558	4,773	28,212	92,108	1,014	7,847
19	08/05	48	57	89	0	0	7,740	51,211	87	676	3,591	11,908	77	557
20	08/07	48	152	381	1	14	31,740	204,421	354	3,093	59,151	199,187	637	5,180
21	08/09	24	28	33	31	204	2,616	17,846	15	148	1,099	3,708	46	162
22	08/10	48	162	361	2	17	22,082	143,795	346	3,067	70,370	241,664	329	2,679
23	08/12	24	36	45	0	0	3,066	20,606	38	364	4,854	16,138	31	242
24	08/13	24	65	129	1	11	9,110	60,228	141	1,298	30,791	108,732	96	803
25	08/14	32	39	66	0	0	5,287	33,850	97	884	21,199	73,508	90	757
26	08/17	24	91	187	0	0	15,737	94,115	281	2,546	67,005	236,183	136	1,156
27	08/21	24	47	82	0	0	11,709	73,378	139	1,312	42,640	144,757	100	859
28	08/25	24	53	86	2	22	8,355	54,654	249	2,278	39,774	138,110	40	337
29	08/28	24	21	34	0	0	3,814	24,907	147	804	19,277	64,908	7	55
30	08/31	36	14	23	0	0	2,103	14,131	15	161	12,021	39,453	0	0
31	09/04	24	3	3	0	0	1,107	6,882	110	1,053	250	925	4	31
33	09/11	150	1	1	0	0	125	818	0	0	0	0	0	0
35	09/25	156	1	1	0	0	0	0	144	1,482	0	0	0	0
Total		1,338	2,172	3,759	675	6,664	336,190	2,203,383	6,058	51,827	514,258	1,755,064	39,830	313,012
Average Weight						9.87		6.55		8.56		3.41		7.86

[a] Starting date of period.

[b] For area and opening times refer to Appendix D.9.

Appendix D.2. Commercial salmon catch by species in the Eshamy District, Prince William Sound, 1986 - 2000.

	CATCH BY SPECIES					
Year	Chinook	Sockeye	Coho	Pink	Chum	Total
DRIFT GILLNET						
1986	0	4	1	938	65	1,008
1987	2	642	3	3,225	7,060	10,932
1988	94	50,868	794	348,873	206,060	606,689
1989 [a]						
1990	110	12,967	574	165,362	264,772	443,785
1991	107	296,234	468	44,516	202,183	543,508
1992	158	373,596	1,017	153,018	50,974	578,763
1993	8	80,807	673	45,974	27,045	154,507
1994	2	61,848	623	254,535	9,497	326,505
1995	21	29,851	1,468	60,712	13,284	105,336
1996	19	179,064	1,056	19,043	23,552	222,734
1997	17	475,498	426	146,324	34,768	657,033
1998	2	98,002	252	101,068	343	199,667
1999	30	86,032	2,036	127,082	13,120	228,300
2000	634	235,085	5,396	375,250	27,511	643,876
Ten Year Average (1990-99)	47	169,390	859	111,763	63,954	346,014
SET GILLNET						
1986	9	1,043	86	42,123	5,764	49,025
1987	31	5,387	336	86,677	45,099	137,530
1988	100	18,321	283	180,456	93,577	292,737
1989 [a]						
1990	56	10,204	532	369,589	94,494	474,875
1991	76	184,028	504	20,075	49,394	254,077
1992	101	144,568	1,242	390,097	4,695	540,703
1993	55	101,717	832	84,568	20,369	207,541
1994	9	97,664	628	311,134	6,908	416,343
1995	19	30,814	695	28,118	6,621	66,267
1996	13	132,268	309	16,648	9,276	158,514
1997	12	196,005	163	76,610	8,475	281,265
1998	1	25,533	91	33,916	214	59,755
1999	131	74,378	1,092	43,443	11,101	130,145
2000	41	101,105	662	139,008	12,319	253,135
Ten Year Average (1990-99)	47	99,718	609	137,420	21,155	258,949
COMBINED GEAR						
1986	9	1,047	87	43,061	5,829	50,033
1987	33	6,029	339	89,902	52,159	148,462
1988	194	69,189	1,077	529,329	299,637	899,426
1989 [a]						
1990	166	23,171	1,106	534,951	359,266	918,660
1991	183	480,262	972	64,591	251,577	797,585
1992	259	518,164	2,259	543,115	55,669	1,119,466
1993	63	182,524	1,505	130,542	47,414	362,048
1994	11	159,512	1,251	565,669	16,405	742,848
1995	40	60,665	2,163	88,830	19,905	171,603
1996	32	311,332	1,365	35,691	32,828	381,248
1997	29	671,503	589	222,934	43,243	938,298
1998	3	123,535	343	134,984	557	259,422
1999	161	160,410	3,128	170,525	24,221	358,445
2000	675	336,190	6,058	514,258	39,830	897,011
Ten Year Average (1990-99)	95	269,108	1,468	249,183	85,109	604,962

[a] Fishing was closed due to oil contamination on the beaches.

Appendix D.3. Daily salmon escapement through the Eshamy weir, Prince William Sound, 2000.

	Sockeye		Pink[a]		Chum		Coho		Chinook	
Date	Daily	Cum.	Daily	Cum.	Daily	Cum.	Daily	Cum.	Daily	Cum.
07/08	500	500	0	0	0	0	0	0	0	0
07/09	0	500	0	0	0	0	0	0	0	0
07/10	0	500	0	0	0	0	0	0	0	0
07/11	0	500	0	0	0	0	0	0	0	0
07/12	0	500	0	0	0	0	0	0	0	0
07/13	6	506	0	0	6	6	0	0	0	0
07/14	2	508	0	0	6	12	0	0	0	0
07/15	493	1,001	1	1	125	137	0	0	0	0
07/16	698	1,699	0	1	30	167	0	0	0	0
07/17	1,031	2,730	1	2	78	245	0	0	0	0
07/18	347	3,077	0	2	24	269	0	0	0	0
07/19	1,008	4,085	0	2	22	291	0	0	0	0
07/20	329	4,414	0	2	21	312	0	0	0	0
07/21	966	5,380	0	2	8	320	0	0	0	0
07/22	1,239	6,619	0	2	11	331	0	0	0	0
07/23	1,159	7,778	7	9	9	340	0	0	0	0
07/24	1,658	9,436	0	9	7	347	0	0	0	0
07/25	367	9,803	5	14	5	352	0	0	0	0
07/26	602	10,405	7	21	2	354	0	0	0	0
07/27	350	10,755	2	23	3	357	0	0	0	0
07/28	812	11,567	5	28	12	369	0	0	1	1
07/29	269	11,836	2	30	1	370	0	0	0	1
07/30	459	12,295	2	32	5	375	0	0	1	2
07/31	158	12,453	6	38	1	376	0	0	0	2
08/01	266	12,719	9	47	0	376	0	0	0	2
08/02	311	13,030	1	48	0	376	0	0	0	2
08/03	560	13,590	33	81	0	376	0	0	0	2
08/04	1,076	14,666	25	106	0	376	0	0	0	2
08/05	577	15,243	27	133	0	376	1	1	0	2
08/06	279	15,522	14	147	0	376	0	1	0	2
08/07	776	16,298	50	197	2	378	0	1	0	2
08/08	474	16,772	27	224	0	378	0	1	0	2
08/09	296	17,068	28	252	0	378	0	1	0	2
08/10	107	17,175	25	277	0	378	0	1	0	2
08/11	418	17,593	35	312	1	379	0	1	0	2
08/12	269	17,862	73	385	0	379	0	1	0	2
08/13	357	18,219	72	457	0	379	1	2	0	2
08/14	143	18,362	47	504	0	379	1	3	0	2
08/15	506	18,868	61	565	0	379	3	6	0	2
08/16	51	18,919	34	599	0	379	0	6	0	2
08/17	234	19,153	109	708	1	380	0	6	0	2
08/18	54	19,207	57	765	0	380	0	6	0	2
08/19	626	19,833	409	1,174	0	380	0	6	0	2
08/20	217	20,050	166	1,340	0	380	0	6	0	2
08/21	444	20,494	470	1,810	0	380	1	7	0	2
08/22	128	20,622	393	2,203	0	380	1	8	0	2
08/23	242	20,864	336	2,539	0	380	0	8	0	2
08/24	33	20,897	508	3,047	0	380	0	8	0	2

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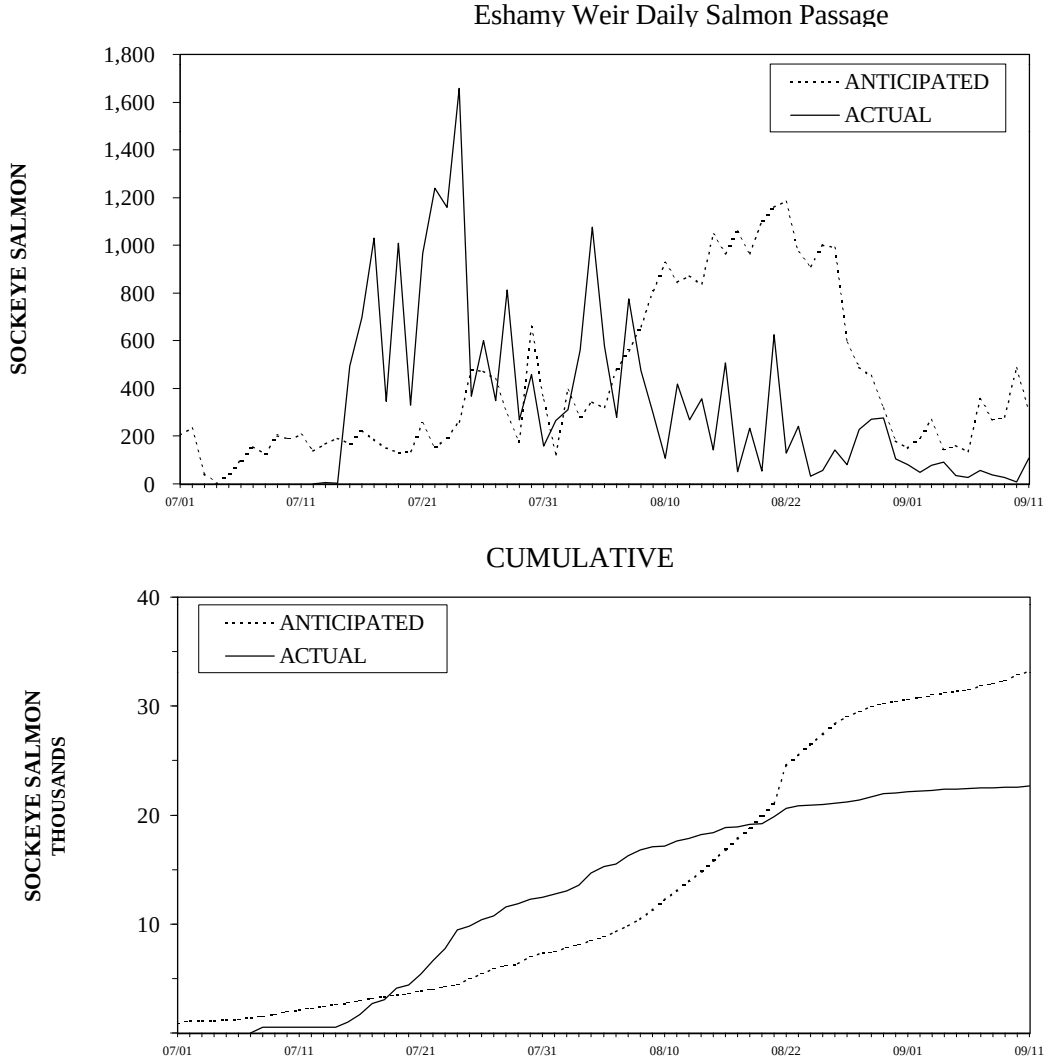
Appendix D.3. (page 2 of 2)

	Sockeye[a]		Pink[b]		Chum		Coho		Chinook	
Date	Daily	Cum.	Daily	Cum.	Daily	Cum.	Daily	Cum.	Daily	Cum.
08/25	56	20,953	1,090	4,137	0	380	1	9	0	2
08/26	143	21,096	1,217	5,354	0	380	9	18	0	2
08/27	80	21,176	889	6,243	0	380	6	24	0	2
08/28	227	21,403	1,338	7,581	0	380	21	45	0	2
08/29	272	21,675	1,820	9,401	0	380	57	102	0	2
08/30	275	21,950	1,211	10,612	1	381	6	108	0	2
08/31	105	22,055	858	11,470	0	381	1	109	0	2
09/01	80	22,135	1,237	12,707	0	381	3	112	0	2
09/02	49	22,184	1,708	14,415	0	381	3	115	0	2
09/03	79	22,263	742	15,157	0	381	2	117	0	2
09/04	91	22,354	1,257	16,414	0	381	6	123	0	2
09/05	36	22,390	927	17,341	0	381	4	127	0	2
09/06	28	22,418	914	18,255	0	381	6	133	0	2
09/07	56	22,474	704	18,959	0	381	7	140	0	2
09/08	37	22,511	602	19,561	0	381	5	145	0	2
09/09	26	22,537	489	20,050	0	381	3	148	0	2
09/10	8	22,545	288	20,338	0	381	0	148	0	2
09/11	108	22,653	177	20,515	0	381	3	151	0	2
Totals	22,653		20,515		381		151		2	

[a] The weir is designed to prohibit passage of sockeye salmon, smaller pink salmon may pass through the weir uncounted.

2000 ESHAMY LAKE SOCKEYE ESCAPEMENT



Appendix D.4. Anticipated daily and cumulative sockeye salmon escapement versus actual escapement past the Eshamy River weir, 2000.

Appendix D.5. Salmon escapement by species at the Eshamy weir, Prince William Sound, 1967-2000.

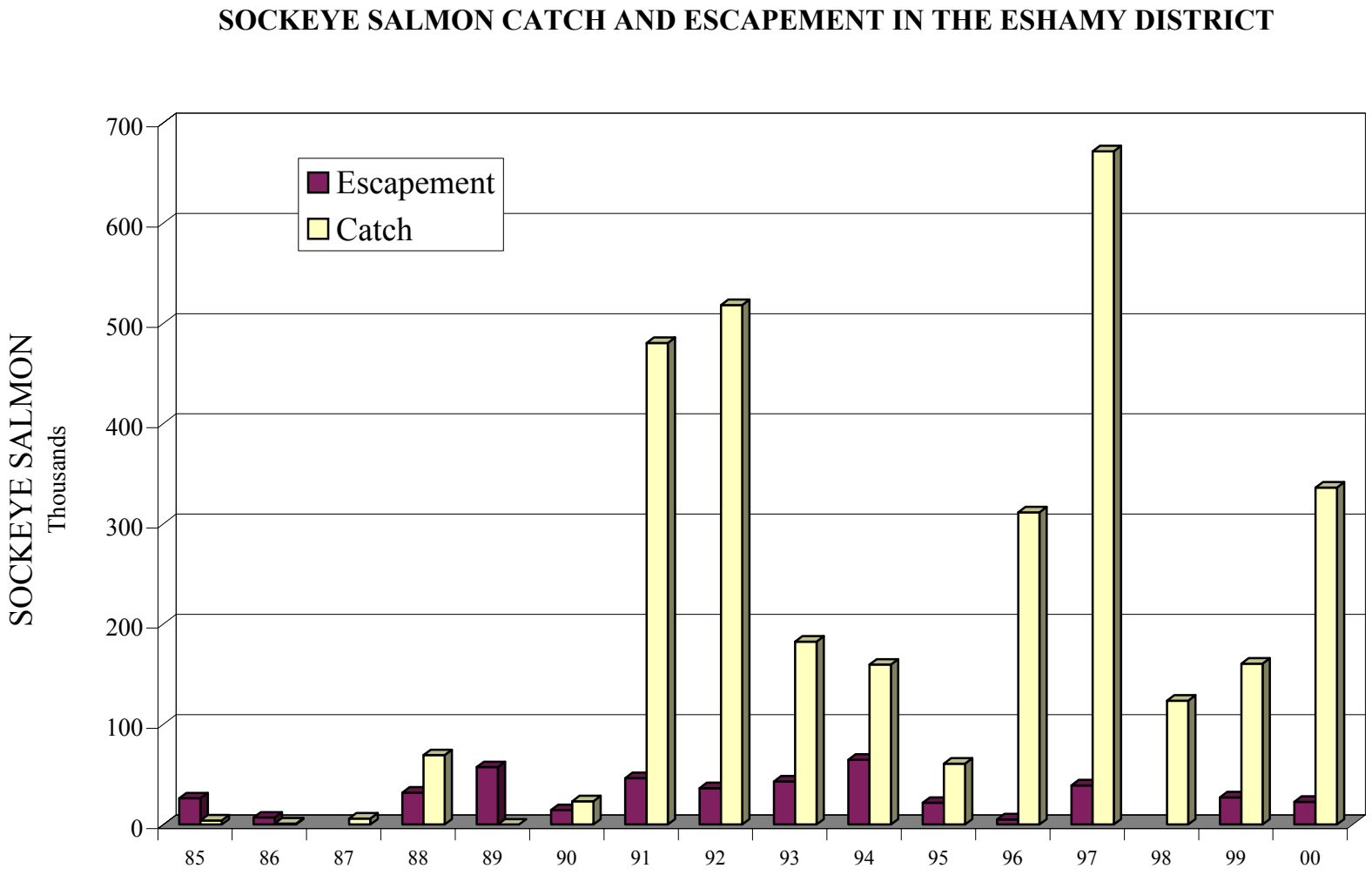
Year	Escapement by Species[a]					Total
	Chinook	Sockeye	Coho	Pink	Chum	
1967	0	10,821	192	10,433	1	21,447
1968	1	68,048	450	919	1	69,419
1969	0	61,196	96	3,095	2	64,389
1970	0	11,460	25	387	0	11,872
1971	0	954 [b]	97	3,179	0	4,230
1972[c]		28,683				28,683
1973	0	10,202	205	1,698	0	12,105
1974[c]		633				633
1975[c]		1,724				1,724
1976[c]		19,367				19,367
1977	0	11,746	230	32,080	0	44,056
1978	0	12,580	20	552	0	13,152
1979	0	12,169	5	3,654	1	15,829
1980	5	44,263	128	963	2	45,361
1981	1	23,048	249	5,956	13	29,267
1982	0	6,782	79	1,056	79	7,996
1983	0	10,348	40	7,047	4	17,439
1984	2	36,121	881	3,970	0	40,974
1985	0	26,178	96	6,271	0	32,545
1986	2	6,949	55	1,004	31	8,041
1987[d]						
1988	2	31,747	48	1,205	1	33,003
1989	1	57,232	0	6,283	210	63,726
1990	0	14,477	43	2,209	5	16,734
1991	2	46,229	907	31,241	17	78,396
1992	1	36,237	52	3,004	5	39,299
1993	1	42,893	92	3,435	9	46,430
1994	1	64,660	1,184	12,061	87	77,993
1995	7	21,701	1,076	18,601	407	41,792
1996	2	5,271	108	7,959	9	13,349
1997	2	39,015	111	15,142	18	54,288
1998[d]						
1999	1	27,057	194	32,756	3	60,011
2000	2	22,653	151	20,515	381	43,702
10 Year Average (1990-1999)	2	33,060	419	14,045	62	47,588

[a] For break down of jacks versus adult sockeye see specific year's daily escapement enumeration table.

[b] Enumeration low due to holes in weir. Actual escapement is estimated to be more than 3,000.

[c] Incidental passage of salmon other than sockeye was not recorded for each year.

[d] The Eshamy weir was not in operation during this year.



Appendix D.6. Sockeye salmon catch and escapement in the Eshamy District, Prince William Sound, 1985 -2000.

Appendix D.7 Temporally stratified age and sex composition of sockeye salmon harvested in the Eshamy District commercial common property gillnet fishery, 2000.

		Brood Year and Age Class						
		1997	1996		1995		1994	
		1.1	0.3	1.2	1.3	2.2	2.3	Total
Strata Combined:	07/17 - 10/01							
Sampling dates:	07/22 - 08/12							
Sample size:	1,806 [a]							
Female	Percentage of sample	0.0	0.2	52.3	2.0	0.8	0.1	55.4
	Number in catch	0	713	175,753	6,756	2,657	472	186,351
Male	Percentage of sample	0.1	0.0	39.1	2.4	0.9	0.1	42.6
	Number in catch	188	0	131,519	8,146	2,921	472	143,246
Total	Percentage of sample	0.1	0.2	93.3	4.5	1.7	0.3	100.0
	Number in catch	188	713	313,676	15,091	5,578	943	336,190
	Standard error	188	503	2,212	1,852	1,100	383	

Appendix D.8 Temporally stratified age and sex composition of the sockeye salmon escapement through the Eshamy River weir, 2000.

		Brood Year and Age Class							
		1998	1997	1996		1995		1994	
		0.1	1.1	1.2	2.1	1.3	2.2	2.3	Total
Stratum dates:	07/13 - 07/19								
Sampling dates:	07/18 - 07/19								
Sample size:	428								
Female	Percentage of sample	0.0	0.0	45.1	0.0	2.1	1.6	0.0	48.8
	Number in escapement	0	0	1,842	0	86	67	0	1,995
Male	Percentage of sample	0.0	0.9	42.3	0.0	6.3	1.6	0.0	51.2
	Number in escapement	0	38	1,728	0	258	67	0	2,090
Total	Percentage of sample	0.0	0.9	87.4	0.0	8.4	3.3	0.0	100.0
	Number in escapement	0	38	3,570	0	344	134	0	4,085
	Standard error	0	19	66	0	55	35	0	
Stratum dates:	07/20 - 08/15								
Sampling dates:	08/14 - 08/15								
Sample size:	432								
Female	Percentage of sample	0.0	0.0	47.0	0.0	2.8	5.6	0.2	55.6
	Number in escapement	0	0	6,947	0	411	821	34	8,213
Male	Percentage of sample	0.2	3.2	31.3	3.0	3.2	3.2	0.2	44.4
	Number in escapement	34	479	4,620	445	479	479	34	6,570
Total	Percentage of sample	0.2	3.2	78.2	3.0	6.0	8.8	0.5	100.0
	Number in escapement	34	479	11,566	445	890	1,300	68	14,783
	Standard error	34	126	294	122	169	202	48	
Stratum dates:	08/16 - 09/11								
Sampling dates:	08/30 - 09/03								
Sample size:	425								
Female	Percentage of sample	0.0	0.0	36.7	0.0	2.1	5.4	0.2	44.5
	Number in escapement	0	0	1,389	0	80	205	9	1,683
Male	Percentage of sample	0.0	2.6	36.7	4.7	3.5	7.1	0.9	55.5
	Number in escapement	0	98	1,389	178	134	267	36	2,102
Total	Percentage of sample	0.0	2.6	73.4	4.7	5.6	12.5	1.2	100.0
	Number in escapement	0	98	2,779	178	214	472	45	3,785
	Standard error	0	29	81	39	42	61	20	
Strata Combined:	07/13 - 09/11								
Sampling dates:	07/18 - 09/03								
Sample size:	1285								
Female	Percentage of sample	0.0	0.0	44.9	0.0	2.5	4.8	0.2	52.5
	Number in escapement	0	0	10,178	0	577	1,093	43	11,891
Male	Percentage of sample	0.2	2.7	34.2	2.8	3.8	3.6	0.3	47.5
	Number in escapement	34	615	7,737	623	870	813	70	10,762
Total	Percentage of sample	0.2	2.7	79.1	2.8	6.4	8.4	0.5	100.0
	Number in escapement	34	615	17,915	623	1,447	1,906	113	22,653
	Standard error	34	131	312	128	183	214	52	

Appendix D.9. Summary of periods, dates, hours open, and emergency orders issued for the commercial salmon fisheries in the Eshamy District, Prince William Sound, 2000.

Main Bay Subdistrict (225-21)			Crafton Island Subdistrict (225-10, 20, 30)			Emergency
Periods	Dates	Hours Open	Periods	Dates	Hours Open	Orders Issued
01	05/15-05/16	36				2-F-E-02-00[a]
02	05/18-05/19	36				2-F-E-02-00[a]
03	05/22-05/23	36				2-F-E-02-00[a]
04	05/25-05/26	36				2-F-E-02-00[a]
05	0529-05/30	36				2-F-E-02-00[a]
06	06/01-06/02	36				2-F-E-02-00[a]
07	06/05-06/06	36				2-F-E-02-00[a]
08	06/08-06/09	36				2-F-E-02-00[a]
09	06/12-06/13	36				2-F-E-02-00[a]
10	07/17-07/18	24	10	07/17-07/18	24	2-F-E-38-00[v]
11	07/20-07/21	24	11	07/20-07/21	24	2-F-E-41-00[v]
12	07/24-07/25	24	12	07/24-07/25	24	2-F-E-42-00[v]
13	07/27-07/28	28	13	07/27-07/28	24	2-F-E-57-00[c]
14	07/29-07/30	48				2-F-E-57-00[c]
15	07/31	24	15	07/31	16	2-F-E-58-00[u]
16	08/01	24	16	08/01	8	2-F-E-58-00[u]
17	08/02-08/03	48	17	08/03	4	2-F-E-59-00[u]
18	08/04	24	18	08/04	20	2-F-E-59-00[u]
19	08/05-08/06	48				2-F-E-57-00[c]
20	08/07-08/08	48	20	08/07-08/08	24	2-F-E-60-00[c]
21	08/09	24				2-F-E-57-00[c]
22	08/10-08/11	48	22	08/10-08/11	24	2-F-E-61-00[c]
23	08/12	24				2-F-E-57-00[c]
24	08/13	24				2-F-E-57-00[c]
25	08/14-08/15	32	25	08/14-08/15	32	2-F-E-62-00[t]
26	08/17-08/18	24	26	08/17-08/18	24	2-F-E-63-00[s]
27	08/21-08/22	24	27	08/21-08/22	24	2-F-E-64-00[t]
28	08/24-05/25	24	28	08/24-05/25	24	2-F-E-72-00[u]
29	08/28-08/29	24	29	08/28-08/29	24	2-F-E-73-00[t]
30	08/31-09/01	24				2-F-E-74-00[j]
31	09/04-09/05	24				2-F-E-74-00[j]
32	09/07-09/08	24				2-F-E-74-00[j]
33	09/11-09/17	150				2-F-E-84-00[k]
34	09/18-09/24	150				2-F-E-84-00[k]
35	09/25-10/01	150				2-F-E-84-00[k]
						2-F-E-90-00[t]

[a] Waters of the Main Bay Subdistrict were open. The alternating gear zone (AGZ) was open to drift gillnet gear during the Monday openings and open to set gillnet gear during the Thursday openings. Waters within 200 feet of the Main Bay Hatchery (MBH) were closed to fishing until 8:00 a.m. Thurday, May 25.

-continued-

[b] The entire Eshamy District, excluding the waters of the AGZ, were open.

[c] Waters of the Eshamy District, up to a line of buoys in front of the MBH barrier seine, were open for 24 hours. In addition, waters of the MBH Terminal Hatchery Area (THA) and the AGZ, up to a line of buoys outside the barrier were open on a continuous basis. The waters of the AGZ were open to set gillnet gear from 8:00 p.m. Thursdays until 8:00 a.m. Mondays and open to drift gillnet gear from 8:00 a.m. Monday until 8:00 p.m. Thursdays.

[d] The Eshamy District, including the AGZ up to a line of buoys in front of the barrier seine, was open. The AGZ was open to drift gillnet gear during the 24-hour period

[e] Waters of the MBH Terminal Hatchery Area (THA) and the AGZ, up to a line of buoys outside the barrier seine, were open on a continuous basis. The waters of the AGZ were open to set gillnet gear from 8:00 p.m. Thursdays until 8:00 a.m. Mondays and open to drift gillnet gear from 8:00 a.m. Monday until 8:00 p.m. Thursdays.

[f] Waters of the Eshamy District, up to a line of buoys in front of the MBH barrier seine, were open for 24 hours. The AGZ was open to drift gillnet gear during the 24-hour period
The continuous schedule of openings was ended at 8:00 a.m. Monday, August 14.

[g] Waters of the Eshamy District, up to a line of buoys in front of the MBH barrier seine, were open for 24 hours. The AGZ was open to set gillnet gear during the 24-hour period

[h] Waters of the Eshamy District, north of the anadromous stream marker on the north side of Loomis Creek, were open. Waters of the AGZ were open to set gillnet gear during thursday's 24-hour opening.

[i] Waters of the Eshamy District, north of the anadromous stream marker on the north side of Loomis Creek, were open. Waters of the AGZ were open to drift gillnet gear during thursday's 24-hour opening.

[j] Waters of the Main Bay Subdistrict were open on a schedule of two 24-hour periods per week. Scheduled periods occurred from 8:00 p.m. Thursdays until 8:00 p.m. Fridays and from 8:00 a.m. Mondays to 8:00 a.m. Tuesdays. Waters of the AGZ were open to the set gillnet gear during the Thursday 24-hour periods and open to drift gillnet gear during the Monday 24-hour periods.

[k] Opening shedule changed effective 2:00 p.m. Monday September 11. The Main Bay Subdistrict was open from 8:00 a.m. Mondays until 8:00 p.m. Sundays. Waters of the AGZ were open to drift gillnet gear from 8:00 a.m. Mondays until 2:00 p.m. Thursdays and to set gillnet gear from 2:00 p.m. Thursdays until 8:00 p.m. Sundays. If one gear type was not fishing in the AGZ during its designated time, the AGZ was open to the other gear type.

[l] The Eshamy District closed for the season effective 8:00 p.m. Sunday, October 8.

APPENDIX E: PRINCE WILLIAM SOUND PURSE SEINE DISTRICTS

Appendix E.1. Prince William Sound commercial purse seine salmon harvest by day, 2000.

Catch[a]			Chinook		Sockeye		Coho		Pink		Chum	
Date	Permits	Landings	Numbers	Pounds	Numbers	Pounds	Numbers	Pounds	Numbers	Pounds	Numbers	Pounds
06/01	4	4	1	25	11	60	3	14	36	107	9,613	73,631
06/02	4	4	0	0	8	48	3	15	43	130	8,780	73,703
06/03	3	4	0	0	0	0	0	0	0	0	8,746	72,948
06/04	4	4	3	42	0	0	0	0	0	0	7,514	64,861
06/05	6	8	4	123	0	0	0	0	0	0	8,788	81,422
06/06	7	10	2	50	0	0	0	0	0	0	14,966	120,454
06/07	17	19	0	0	0	0	0	0	0	0	26,234	222,653
06/08	4	4	0	0	0	0	0	0	0	0	9,565	75,355
06/09	14	15	1	36	0	0	0	0	0	0	28,976	258,005
06/10	18	21	5	146	2	12	0	0	0	0	46,471	399,259
06/11	19	19	0	0	0	0	0	0	0	0	23,540	197,134
06/12	17	19	0	0	0	0	0	0	0	0	25,347	209,318
06/13	15	15	9	228	0	0	0	0	0	0	24,974	219,254
06/14	25	26	8	161	0	0	0	0	0	0	37,421	305,045
06/15	21	22	1	26	0	0	0	0	0	0	27,906	233,692
06/16	19	21	2	23	0	0	1	8	1	3	33,118	289,148
06/17	22	23	0	0	0	0	0	0	0	0	38,993	314,671
06/18	34	34	2	57	3	19	0	0	2	8	51,417	427,359
06/19	26	26	0	0	1	6	0	0	8	24	42,301	339,726
06/20	33	36	2	28	0	0	0	0	0	0	63,317	512,176
06/21	36	45	3	60	2	12	0	0	0	0	121,922	976,241
06/22	33	36	1	8	1	5	0	0	0	0	83,799	686,775
06/23	30	31	10	200	8	46	6	43	47	161	70,864	584,115
06/24	33	36	20	217	0	0	0	0	48	196	54,294	431,535
06/25	25	25	0	0	0	0	0	0	0	0	26,999	215,272
06/26	28	32	1	28	12	80	0	0	0	0	53,105	433,313
06/27	19	22	0	0	47	320	0	0	0	0	44,334	351,686
06/28	24	28	0	0	34	278	0	0	0	0	58,442	463,495
06/29	25	26	1	24	28	210	1	14	4,973	15,334	57,815	462,351
06/30	41	45	2	29	261	1,610	74	575	199,345	671,914	52,679	426,581
07/01	25	27	4	108	71	425	0	0	42,144	145,966	32,539	258,267
07/02	18	22	1	12	13	83	3	21	26,747	86,845	33,461	289,168
07/03	13	14	0	0	13	100	0	0	350	1,151	24,993	197,319
07/04	95	156	4	72	95	602	50	397	1,494,795	4,894,989	29,222	241,947
07/05	12	12	0	0	0	0	0	0	1	3	16,908	139,643
07/06	72	101	2	23	65	366	7	51	950,786	3,194,764	14,064	111,088
07/07	10	16	0	0	1	5	0	0	23	78	20,212	164,798
07/08	6	6	0	0	0	0	0	0	0	0	4,903	39,231
07/09	100	176	4	56	217	1,211	15	98	1,595,273	5,383,428	11,907	95,060
07/10	7	12	0	0	55	364	0	0	32	112	14,643	119,862
07/11	101	155	4	54	54	320	4	27	1,300,290	4,446,679	1,746	14,488
07/12	5	5	0	0	29	208	0	0	94	324	10,972	87,795
07/13	106	136	12	77	213	1,294	23	157	1,237,001	4,209,218	8,225	66,791
07/14	5	5	0	0	29	192	0	0	191	664	11,477	91,426
07/15	100	108	7	45	545	3,254	145	1,110	567,448	1,846,719	53,851	435,879
07/16	3	3	0	0	36	214	0	0	133	306	8,099	64,794
07/17	47	47	0	0	199	1,214	38	297	88,163	290,819	28,337	228,410
07/18	4	4	0	0	174	1,147	0	0	77	263	5,192	41,538
07/19	3	3	0	0	64	453	0	0	651	2,216	927	7,434
07/20	1	1	0	0	12	73	0	0	343	1,180	493	3,945
07/21	89	90	8	91	239	1,417	288	2,115	265,016	868,232	60,473	499,609
07/22	1	1	0	0	0	0	0	0	89	305	15	126
07/24	5	6	0	0	42	253	0	0	5,781	19,884	971	7,901
07/25	2	2	0	0	24	145	0	0	2,342	8,064	110	907
07/26	106	114	10	190	6,040	37,747	3,474	30,162	438,182	1,525,920	42,319	347,527
07/27	16	17	1	8	100	622	1,317	10,793	72,179	239,597	3,756	31,706
07/28	23	24	1	15	104	679	766	6,010	41,895	148,048	2,268	18,950
07/29	13	13	0	0	52	306	961	8,734	33,219	99,283	1,594	15,331
07/30	10	10	1	7	3	12	1,597	13,416	21,389	71,207	2,516	21,724
07/31	8	8	0	0	0	0	1,290	9,983	15,819	55,866	1,332	11,349
08/01	117	127	0	0	4,428	28,766	4,153	32,413	707,789	2,334,981	70,706	588,818
08/05	124	145	8	148	3,190	20,416	4,058	31,592	1,220,384	4,119,063	33,426	277,916

-continued-

Appendix E.1. (page 2 of 2)

Catch[a]			Chinook		Sockeye		Coho		Pink		Chum	
Date	Permits	Landings	Numbers	Pounds	Numbers	Pounds	Numbers	Pounds	Numbers	Pounds	Numbers	Pounds
08/07	97	118	5	57	3,535	21,696	2,575	21,174	1,083,216	3,549,630	11,641	93,606
08/09	120	145	2	11	2,382	15,038	3,063	25,917	1,276,444	4,173,281	7,128	61,740
08/12	121	137	27	229	1,480	9,302	3,880	33,487	1,127,587	3,763,057	3,346	28,472
08/15	88	89	2	24	42	269	4,657	39,731	387,758	1,282,894	5,068	43,642
08/17	119	135	4	27	1,450	8,907	7,715	71,529	1,234,668	4,117,217	1,143	9,635
08/19	122	221	2	27	2,960	18,309	4,548	43,222	2,402,633	7,957,181	477	3,942
08/21	119	198	0	0	2,347	14,558	5,953	55,260	1,808,022	6,256,564	361	3,138
08/23	113	199	1	10	1,378	8,525	5,003	47,155	2,159,146	7,291,136	465	3,883
08/24	17	22	0	0	140	859	757	5,921	197,091	628,753	21	150
08/25	101	129	0	0	621	3,653	7,507	61,581	1,123,679	3,841,731	430	3,658
08/26	54	64	1	15	273	1,564	3,409	28,839	452,703	1,534,837	46	363
08/27	75	100	0	0	494	2,999	6,457	48,650	894,556	3,027,051	258	2,087
08/28	38	42	0	0	300	1,768	2,335	20,737	356,389	1,250,311	24	143
08/29	38	52	0	0	218	1,303	2,719	21,187	554,511	1,853,684	73	592
08/30	24	26	0	0	83	485	1,429	11,463	288,325	989,101	1	8
08/31	28	34	0	0	157	1,069	4,334	33,770	321,297	1,082,738	91	780
09/01	20	23	0	0	97	584	2,417	19,178	203,893	672,836	28	258
09/02	14	15	0	0	62	373	4,887	38,858	131,474	426,455	34	261
09/03	17	26	0	0	107	695	4,172	34,118	188,458	611,302	14	114
09/04	11	14	0	0	20	128	2,423	19,259	106,113	330,709	0	0
09/05	6	6	0	0	14	81	1,087	9,157	42,701	140,429	1	7
09/06	41	46	0	0	7	40	105,141	927,228	25,127	75,381	28	218
09/07	25	30	0	0	0	0	50,093	468,634	4	30	0	0
09/08	3	3	0	0	0	0	9,029	85,784	0	0	0	0
09/14	5	5	0	0	0	0	0	0	85,928	297,557	0	0
09/15	2	3	0	0	0	0	0	0	80,171	275,371	0	0
09/16	1	1	0	0	0	0	0	0	19,513	68,296	0	0
09/17	2	2	0	0	0	0	0	0	62,263	213,798	0	0
09/18	4	4	0	0	0	0	0	0	80,502	276,429	0	0
09/19	2	2	0	0	0	0	0	0	14,724	48,171	0	0
09/20	1	1	0	0	0	0	0	0	18,410	64,436	0	0
09/21	2	2	0	0	0	0	218	2,176	44,540	151,436	0	0
09/22	2	2	0	0	0	0	0	0	23,097	80,071	0	0
09/23	1	2	0	0	0	0	0	0	19,347	67,715	0	0
Totals	131	4,124	189	2,817	34,692	216,799	264,085	2,322,060	27,147,419	91,083,639	1,744,575	14,298,622
Average Weight				14.90		6.25		8.79		3.36		8.20

[a] Refer to Appendix C.11. and E.15 for a summary of periods, dates and emergency orders issued

Appendix E.2. Commercial salmon harvest by species, all gear and districts combined, Prince William Sound, 1971 - 2000.

CATCH BY SPECIES						
Year[a]	Chinook	Sockeye	Coho	Pink	Chum	Total
1971	3,551	88,368	30,551	7,310,964	574,265	8,007,699
1972[b]	547	197,526	1,634	54,783	45,370	299,860
1973	2,405	124,802	1,399	2,056,878	729,839	2,915,323
1974[b]	1,590	129,366	801	448,773	88,544	669,074
1975	2,519	189,613	6,142	4,452,805	100,479	4,751,558
1976	1,044	112,809	6,171	3,018,991	370,478	3,509,493
1977	648	310,358	843	4,513,082	572,610	5,397,541
1978	1,042	222,083	1,495	2,913,721	485,147	3,623,488
1979	2,015	150,040	6,843	15,607,620	326,414	16,092,932
1980	189	189,816	2,952	14,157,057	482,016	14,832,030
1981	404	251,222	4,383	20,524,470	1,878,716	22,659,195
1982	255	1,055,099	24,362	20,396,222	1,335,368	22,811,306
1983	1,048	92,111	10,496	14,038,796	1,041,309	15,183,760
1984	489	311,955	12,420	22,086,806	1,201,842	23,613,512
1985	1,104	493,278	19,753	25,056,663	1,280,093	26,850,891
1986	1,330	488,715	12,277	11,407,271	1,683,049	13,592,642
1987	874	540,109	47,751	29,198,507	1,904,494	31,691,735
1988	1,037	183,572	75,709	11,817,323	1,832,114	13,909,755
1989	1,113	140,090	203,574	21,860,582	995,962	23,201,321
1990	447	58,497	234,525	44,163,479	959,838	45,416,786
1991	445	507,815	145,311	37,134,311	331,906	38,119,788
1992	1,475	780,932	202,311	8,635,448	328,568	9,948,734
1993	2,148	418,948	48,310	5,761,436	1,173,341	7,404,183
1994	1,376	334,183	121,518	36,874,188	1,039,095	38,370,360
1995	1,364	230,057	140,314	16,045,396	702,216	17,119,347
1996	700	606,525	172,448	26,036,570	2,077,996	28,894,239
1997	1,186	1,197,776	64,360	25,828,078	2,224,725	29,316,125
1998	2,013	365,591	74,105	28,664,281	1,266,887	30,372,877
1999	1,055	339,037	81,841	44,993,247	2,963,838	48,379,018
2000	1,133	548,790	353,013	38,875,724	5,158,397	44,937,057
Ten Year Average (1990-99)	1,221	483,936	128,504	27,413,643	1,306,841	29,334,146

[a] Includes purse seine, drift gillnet and set gillnet catches from all P.W.S. fishing districts; Eastern, Northern, Unakwik, Coghill, Northwestern, Eshamy, Southwestern, Montague and Southeastern. Also includes hatchery sales harvests, confiscated fish, donated and discarded fish catch, the surimi study fish, and special use educational permit catches.

[b] General purse seine season closed.

Appendix E.3. Commercial pink salmon harvest for all gear types, by district, Prince William Sound, 1975-2000 (includes purse seine, drift gillnet, and set gillnet catches from all Prince William Sound districts; Unakwik catches are included in the Northern District. Does not include hatchery cost recovery, confiscated and test fish harvests).

	DISTRICT								
Year	Eastern	Northern	Coghill	Northwestern	Eshamy	Southwestern	Montague	Southeastern	Total
1975	712,328	171,657	303,597	420,891		1,673,887	118,467	875,456	4,276,283
1976	1,380,943	384,267	217,696	207,190		589,458		82,366	2,861,920
1977	1,673,044	147,964	230,215	208,727		930,469	77,104	824,374	4,091,897
1978	1,516,076	933,013	13,059					216,696	2,678,844
1979	4,500,032	115,886	38,560	59,423		5,111,073	1,347,413	4,160,925	15,333,312
1980	3,140,134	1,271,177	134,876	306,109		7,507,776	950	1,271,389	13,632,411
1981	4,797,583	1,194,621	34,155	46,874		10,371,220	278,879	3,221,268	19,944,600
1982	2,959,601	2,331,903	1,000,524	520,972	3,997	10,801,771	6,444	747,116	18,372,328
1983	2,430,063	1,021,345	273,131	714,522		5,957,068	158,241	1,482,013	12,036,383
1984	4,525,029	2,194,904	996,483	1,412,822	544,082	10,197,349	11,587	1,245,042	21,127,298
1985	6,715,143	1,002,872	523,773	527,132	58,183	10,843,752	1,448,809	2,733,562	23,853,226
1986	2,488,540	944,871	214,593	285,184	43,061	6,374,535		147,268	10,498,052
1987	6,964,549	2,419,611	1,578,568	750,877	89,902	13,341,940	111,011	955,988	26,212,446
1988	481,324	286,743	2,932,072	7,738	529,329	5,411,424		1,776	9,650,406
1989	3,151,096	6,464,090	3,925,487	181,565	[a]	[a]	[a]	73,177	13,795,415
1990	7,970,364	5,482,585	2,692,788	891,444	534,951	17,811,479	10,658	12,325	35,406,594
1991	2,617,222	4,150,612	2,211,575		64,591	17,849,425			26,893,425
1992	489,228	1,142,061	363,887		543,115	3,039,775			5,578,066
1993		413,308	493,747		130,542	2,475,798			3,513,395
1994	11,554,320	7,171,038	3,597,094		565,669	3,408,093			26,296,214
1995	4,235,638	3,656,119	1,078,693		88,830	1,707,745	18,239	11,418	10,796,682
1996[b]	6,059,063	5,039,988	1,543,869		35,691	5,046,919			17,725,530
1997[c]	4,534,365	3,162,822	2,030,586		222,934	5,929,544	65,107	28,040	15,973,398
1998[c]	2,231,061	5,035,736	3,228,761		134,984	8,425,853	430,525	350,081	19,837,001
1999	12,305,629	4,981,085	3,542,130		170,525	9,511,998	189,641	914,907	31,615,915
2000	9,819,466	4,093,620	3,359,542	17,223	514,258	9,308,399	87,634	549,763	27,749,905
10 year Average (1990-99)	5,777,432	4,023,535	2,078,313	891,444	249,183	7,520,663	142,834	263,354	19,363,622

[a] These districts were closed due to the Exxon Valdez oil spill.

[b] Eastern and Northern District totals include discarded salmon.

[c] Montague District totals include discarded salmon.

Appendix E.4. Aerial escapement indices for pink and chum salmon by district, Prince William Sound, 2000.

PINK SALMON (EVEN CYCLE)

District	Escapement Goal	Even Cycle Escapement Range	1976-98 Mean Index	Observed Escapement Index[a]	Deviation From Goal
Eastern	474,000	427,000 - 521,000	409,909	554,984	17.1%
Northern/Unakwik	213,000	192,000 - 235,000	156,014	168,247	-21.0%
Coghill	143,000	129,000 - 158,000	108,528	223,646	56.4%
Northwestern[b]	135,000	122,000 - 149,000	99,196	66,078	-51.1%
Eshamy[b]	8,200	7,000 - 9,000	1,851	4,286	-47.7%
Southwestern	144,000	130,000 - 159,000	101,964	131,648	-8.6%
Montague	70,000	63,000 - 77,000	65,432	227,881	225.5%
Southeastern	239,000	215,000 - 263,000	211,307	282,258	18.1%
Total	1,426,200		1,154,200	1,659,028	16.3%

CHUM SALMON

District	Escapement Goal	Desired Escapement Range	1976-99 Mean Index	Observed Escapement Index[a]	Deviation From Goal
Eastern	98,100	87,200 - 109,000	90,277	196,253	100.1%
Northern/Unakwik	33,075	29,400 - 36,750	38,691	23,655	-28.5%
Coghill	33,325	29,600 - 37,050	20,903	20,488	-38.5%
Northwestern[b]	21,350	19,000 - 23,700	14,758	10,150	-52.5%
Eshamy[b]	0	0 - 0	33	16	1600.0%
Southwestern	3,825	3,400 - 4,250	1,880	11,440	199.1%
Montague	12,825	11,400 - 14,250	1,074	66,202	416.2%
Southeastern	22,500	20,000 - 25,000	18,694	34,969	55.4%
Total	225,000		186,309	363,173	61.4%

[a]Based on weekly aerial survey counts of 209 index spawning streams in Prince William Sound. This does not represent the total spawning escapement but rather a comparable annual index.

[b]Aerial Surveys were not flown in these districts for twenty-six days from mid-August through early September due to inclement weather. As a result, observed escapement indexes for these districts may be low.

Appendix E.5. Pink salmon harvests and escapement indices, including hatchery sales harvests and broodstock, Prince William Sound, 1971 - 2000. Historical data revised in 1989.

	PINK SALMON ESCAPEMENTS[a]									Hatchery		Common Property	
Year	Eastern	Northern/ Unakwik	Coghill	Northwest	Eshamy	Southwest	Montague	Southeastern	Total	Sales	Brood	Catch[b]	Total Run[c]
1965	257,853	59,820	91,584	159,011	9,340	65,380	77,042	255,926	975,956			2,460,471	3,436,427
66	544,980	288,710	135,440	79,960	11,720	115,570	42,220	204,570	1,423,170			2,699,418	4,122,588
67	255,240	144,200	65,240	82,980	5,020	42,950	10,020	236,610	842,260			2,626,340	3,468,600
68	364,930	151,120	108,020	117,430	10,770	172,770	52,350	179,120	1,156,510			2,452,168	3,608,678
69	160,600	94,770	39,020	23,830	0	57,890	1,550	26,910	404,570			4,828,579	5,233,149
71	352,800	126,210	62,160	14,320	1,710	79,140	296,730	179,480	1,112,550			7,310,964	8,423,514
72	344,470	83,900	30,960	39,020	1,100	29,530	33,140	79,060	641,180			54,783	695,963
73	309,040	69,660	493,780	2,910	0	52,320	119,520	177,780	1,225,010			2,056,878	3,281,888
74	256,880	206,750	56,940	163,930	6,240	160,980	11,750	94,650	958,120			448,773	1,406,893
1975	412,560	38,260	452,430	4,990	0	77,270	85,380	194,670	1,265,560			4,452,805	5,718,365
76	472,080	139,600	57,090	68,150	5,840	52,120	13,790	117,590	926,260			3,018,995	3,945,255
77	390,930	69,980	130,510	80,890	16,450	178,670	152,960	277,780	1,298,170	7,745	16,112	4,514,431	5,844,258
78	279,120	163,010	85,450	132,300	5,430	258,980	56,690	164,030	1,145,010	114,188	40,432	2,780,073	4,079,703
79	642,220	200,730	70,980	124,020	0	231,300	219,400	728,630	2,217,280	223,748	54,207	15,393,223	17,888,458
1980	535,960	189,140	214,930	159,260	13,100	133,470	118,400	307,680	1,671,940	346,728	145,061	13,434,024	15,597,753
81	599,340	243,170	106,450	51,210	3,990	93,630	255,420	359,870	1,713,080	707,037	268,501	19,286,542	21,975,160
82	573,070	332,560	368,380	174,290	15,080	195,950	132,380	482,860	2,274,570	1,354,732	239,945	18,858,647	22,727,894
83	481,950	168,410	310,330	196,630	12,610	161,290	230,200	601,680	2,163,100	686,963	258,062	13,309,461	16,347,586
84	1,209,740	593,310	429,450	452,370	16,860	345,760	191,810	792,560	4,031,860	415,393	341,259	21,683,076	26,471,588
1985	750,530	214,210	296,970	199,190	1,410	181,270	332,240	645,510	2,621,330	1,209,960	640,340	23,959,698	28,431,328
86	356,380	141,420	101,600	81,490	3,840	74,980	44,680	155,830	960,220	905,464	466,471	10,498,052	12,830,207
87	514,570	132,960	147,060	75,390	3,450	112,920	149,260	330,630	1,466,240	2,691,190	1,158,908	26,125,769	31,442,107
88	362,370	143,850	37,070	73,780	490	126,440	67,990	152,540	964,530	1,632,701	824,302	9,650,406	13,071,939
89	359,730	106,530	45,510	68,540	19,470	176,230	181,760	315,000	1,272,770	5,737,911	856,927	13,854,209	23,796,279
1990	443,660	131,580	49,110	115,870	17,870	150,100	113,572	304,090	1,325,852	6,691,160	749,910	35,430,821	46,239,241
91	474,380	165,930	98,580	101,320	18,800	197,095	247,890	533,170	1,837,165	5,201,860	1,324,255	31,178,750	40,295,731
92	204,383	72,915	23,611	42,308	2,709	66,953	47,156	95,070	555,105	2,626,248	802,117	5,578,099	9,984,715
93	315,209	95,614	41,837	46,011	9,348	98,573	144,784	315,093	1,066,469	2,212,403	893,462	3,548,694	7,721,028
94	615,240	178,151	65,648	141,290	11,799	144,594	60,084	196,378	1,413,184	10,521,439	1,467,755	26,364,862	39,767,240
1995	396,696	84,447	46,029	50,582	10,182	82,490	183,448	336,310	1,190,184	5,090,152	1,154,635	10,975,079	18,410,050
96	584,236	218,022	104,781	86,709	3,000	63,337	92,966	330,285	1,483,336	8,291,205	1,264,701	17,745,365	28,784,607
97	345,725	65,260	52,961	53,740	914	112,010	206,943	585,135	1,422,688	9,854,675	1,048,485	15,973,403	28,299,251
98	377,700	213,288	85,968	97,485	4,644	280,335	161,275	199,410	1,420,105	8,825,226	933,503	19,836,055	31,014,889
99	622,502	214,723	168,816	52,340	6,900	163,347	381,054	853,180	2,462,862	13,130,211	1,511,755	31,615,915	48,720,743
2000	554,984	168,247	223,646	66,078	4,286	131,648	227,881	282,258	1,659,028	11,125,819	977,075	27,749,905	41,511,827
01	436,585	163,573	148,665	102,294	2,963	176,503	314,323	655,480	2,000,386	12,914,314			
EVEN CYCLE AVG. (1966-98)													
Avg.	465,429	198,393	120,566	124,018	8,124	143,451	77,302	235,081	1,372,363	3,793,135	661,405	11,373,154	15,772,845
ODD CYCLE AVG. (1965-99)													
Avg.	424,549	127,494	151,125	77,106	6,644	120,210	181,978	386,298	1,475,403	3,896,155	765,471	12,970,623	17,706,885

[a]Coghill and Northwestern escapement figures correspond to current district boundaries.

[b]Includes the common property harvest of both wild and hatchery stocks. Does not include hatchery sales harvests.

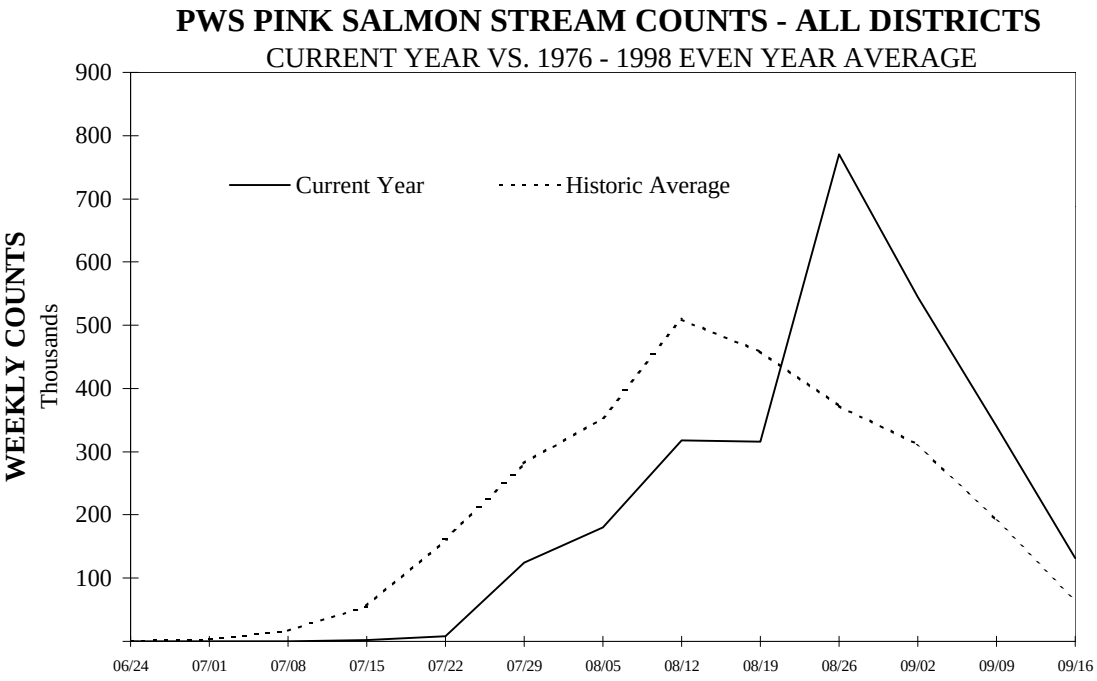
[c]Represents the sum of the commercial catch, hatchery sales, brood (including roe recoveries), plus the escapement index. Does not account for wild stock escapement into non-index streams.

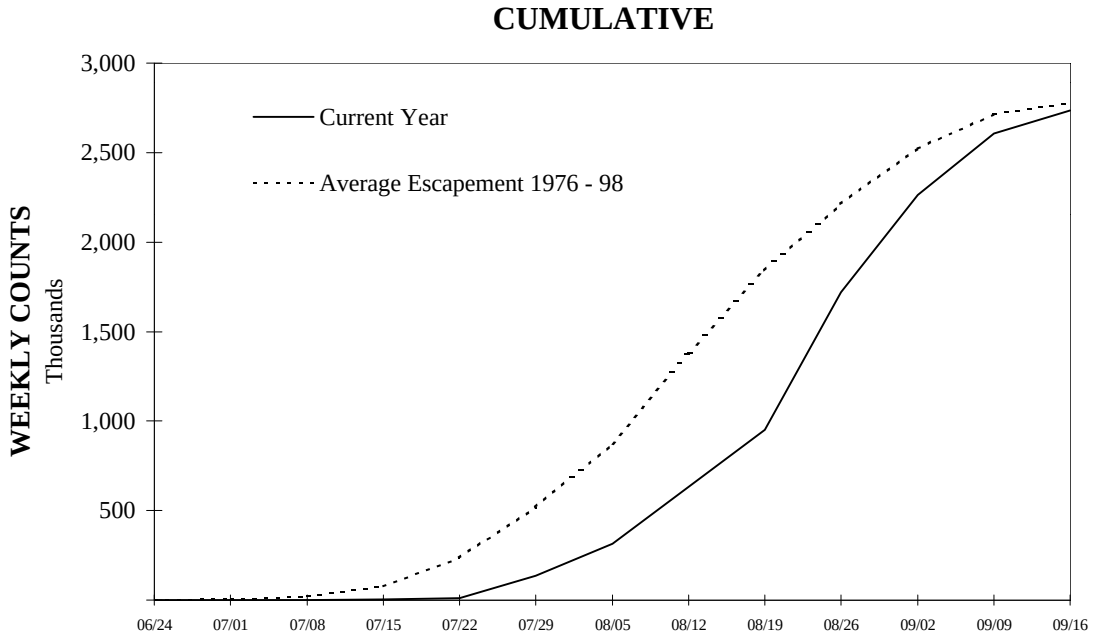
Appendix E.6. Weekly aerial estimates of pink salmon escapement by statistical area, Prince William Sound, 2000.

Survey Location		Week Ending Dates[a]													Adjusted Total[b]
		06/24	07/01	07/08	07/15	07/22	07/29	08/05	08/12	08/19	08/26	09/02	09/09	09/16	
Orca Inlet	22110	NS	NS	0	0	NS	5,800	5,500	17,950	13,500	25,000	7,700	2,000	NS	40,575
Simpson & Sheep Bay	22120	0	0	NS	0	200	2,800	5,775	29,850	NS	42,700	NS	29,550	NS	87,113
Port Gravina	22130	0	0	300	100	270	9,100	20,300	28,755	NS	54,000	NS	100,100	NS	145,242
Port Fidalgo	22140	0	0	0	0	300	7,650	18,500	30,450	NS	50,600	NS	84,000	NS	137,664
Valdez Arm	22150	0	50	100	370	4,160	12,950	9,100	41,355	NS	40,250	NS	74,400	NS	136,841
Port Valdez	22161	NS	NS	NS	NS	NS	550	600	7,050	NS	400	NS	NS	NS	7,549
Eastern District Total		0	50	400	470	4,930	38,850	59,775	155,410	13,500	212,950	7,700	290,050	NS	554,984
Columbia & Long Bay	22210	0	0	0	0	70	1,500	1,500	8,975	NS	24,320	NS	29,750	650	45,628
Wells Bay & Unakwik Inlet	22220	0	0	0	558	0	2,600	23,700	16,875	16,525	37,606	27,606	20,650	20,126	95,261
Eaglek Bay	22230	NS	NS	NS	NS	NS	5,650	5,700	6,200	3,360	5,275	18,150	NS	4,810	25,631
Northern District Total		0	0	0	558	70	9,750	30,900	32,050	19,885	67,201	45,756	50,400	25,586	166,520
Upper Unakwik Inlet	22910	NS	NS	NS	NS	NS	0	0	200	150	100	1,000	NS	1,000	1,727
Unakwik District (229) Total		NS	NS	NS	NS	NS	0	0	200	150	100	1,000	NS	1,000	1,727
West Side Port Wells	22310	NS	NS	NS	NS	NS	13,320	17,750	6,500	9,000	14,700	NS	NS	10,810	49,568
Esther Passage	22320	NS	NS	NS	NS	NS	0	100	425	100	550	500	NS	300	975
College Fiord	22330	NS	NS	NS	NS	NS	3,500	20,000	25,010	80,000	105,010	110,010	NS	12,300	173,103
Coghill District Total		NS	NS	NS	NS	NS	16,820	37,850	31,935	89,100	120,260	110,510	NS	23,410	223,646
Passage Canal & Cochrane	22410	NS	NS	NS	NS	NS	6,700	11,600	5,200	6,700	900	NS	NS	16,700	35,292
Culross Passage	22430	NS	NS	NS	NS	NS	100	500	2,000	300	0	NS	NS	3,200	5,028
Port Nellie Juan	22440	NS	NS	NS	NS	NS	11,350	10,550	7,900	3,375	NS	NS	NS	9,100	25,758
Northwestern District Total		NS	NS	NS	NS	NS	18,150	22,650	15,100	10,375	900	NS	NS	29,000	66,078
Crafton/Eshamy	22530	NS	NS	NS	NS	NS	50	50	420	100	200	NS	NS	4,250	4,286
Eshamy District Total		NS	NS	NS	NS	NS	50	50	420	100	200	NS	NS	4,250	4,286
Chenega Is. & Dangerous Passage	22620	NS	NS	NS	NS	1,300	4,900	NS	16,000	24,800	60,100	45,150	NS	31,160	94,542
East Knight Is.	22630	NS	NS	NS	NS	400	300	2,500	NS	4,000	2,500	2,000	NS	4,500	8,671
Bainbridge & Latouche Passage	22640	NS	NS	NS	NS	0	260	NS	970	2,430	6,000	12,400	NS	11,906	20,172
Port Bainbridge	22650	NS	NS	NS	NS	300	1,000	NS	1,500	1,500	6,000	6,000	NS	500	8,263
Southwestern District Total		NS	NS	NS	NS	2,000	6,460	2,500	18,470	32,730	74,600	65,550	NS	48,066	131,648
Montague Strait	22710	NS	NS	NS	NS	1,100	720	16,000	NS	22,500	74,100	112,650	NS	NS	137,856
Green Island	22720	NS	NS	NS	NS	0	500	10,410	NS	21,600	59,650	78,400	NS	NS	90,025
Montague District Total		NS	NS	NS	NS	1,100	1,220	26,410	NS	44,100	133,750	191,050	NS	NS	227,881
Orca Is. & East Hawkins	22810	NS	NS	0	0	NS	0	NS	500	200	1,200	1,000	NS	NS	1,291
Hawkins Cutoff	22820	NS	NS	0	920	NS	10,400	NS	16,600	34,800	41,400	NS	NS	NS	68,976
North Hawkins & Canoe Passage	22830	NS	NS	0	0	NS	9,200	NS	22,400	22,200	43,200	26,200	NS	NS	65,519
Double Bay	22840	NS	NS	0	0	NS	545	NS	3,800	8,500	19,800	22,800	NS	NS	31,249
Johnstone Point	22850	NS	NS	0	50	NS	300	NS	5,100	7,900	8,800	15,700	NS	NS	21,535
Port Etches	22860	NS	NS	0	500	NS	12,300	NS	16,100	32,600	46,200	57,300	NS	NS	93,688
Southeastern District Total		NS	NS	0	1,470	NS	32,745	NS	64,500	106,200	160,600	123,000	NS	NS	282,258
TOTAL OF 9 DISTRICTS		0	50	400	2,498	8,100	124,045	180,135	318,085	316,140	770,561	544,566	340,450	131,312	1,659,028

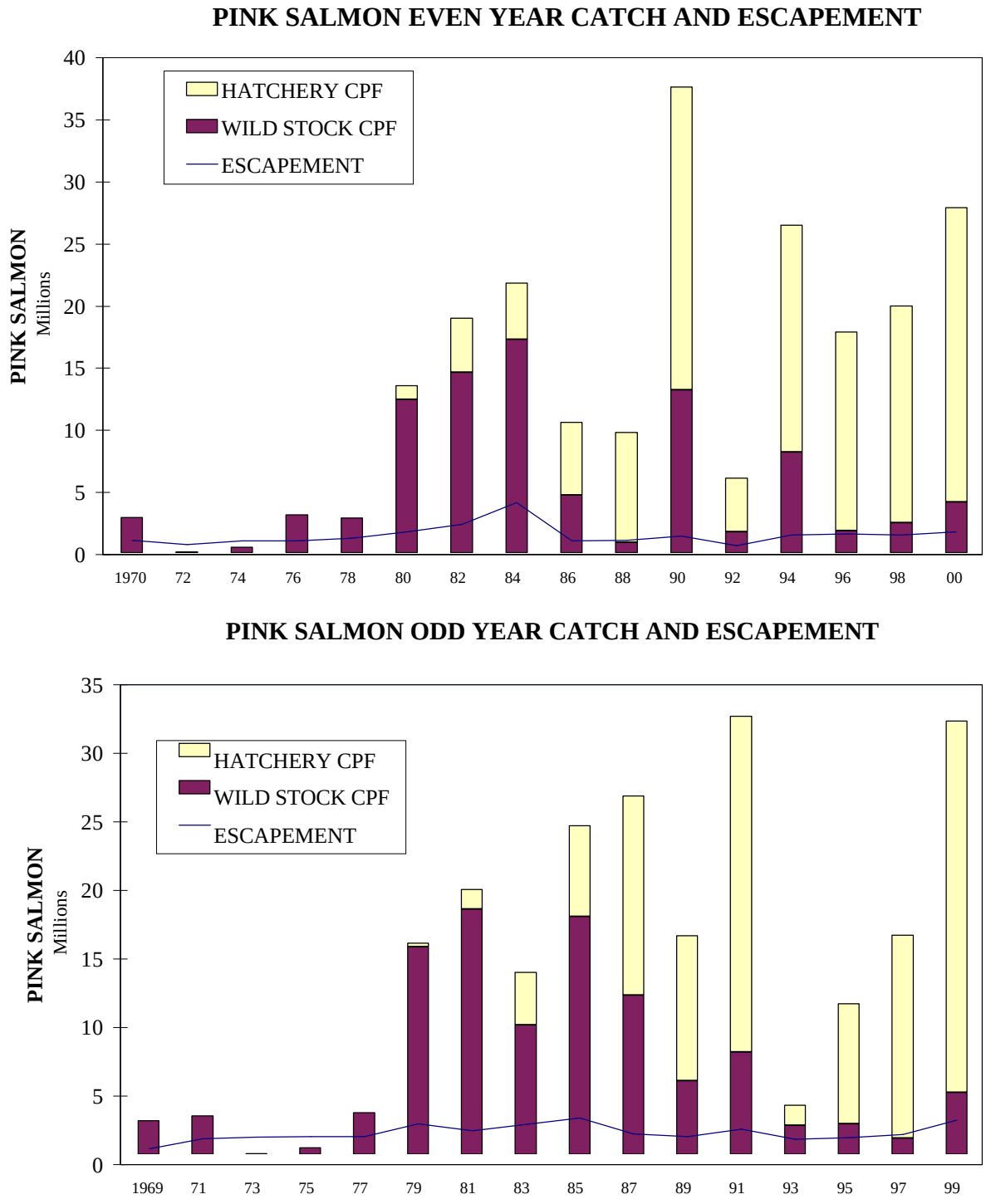
[a]There are a total of 209 streams included in the systematic aerial survey program. The survey program commences in the Eastern District where the earliest escapements in the Sound occur. Weather and conditions permitting, each stream is flown weekly. Failure to fly a survey due to run timing or bad survey conditions is denoted by NS (no survey). A notation of NC (no count) occurs when a stream is flown but no count is possible because of survey conditions (ie. water clarity). During the peak of the pink salmon run many streams are flown twice weekly to provide fisheries managers with more timely escapement data. In cases where more than one survey per week was flown the weekly observation shown in this table is the average of the two counts if observing conditions during both were good or, the maximum of the two counts if conditions during the minimum count were poor.

[b]The adjusted total is an escapement estimate based a geometric method used since the inception of the systematic survey program in the early 1960's. In this method, aerial observers are assumed to count without error or bias. Linear interpolations between observations are used to estimate numbers of fish in the stream on days when no surveys are flown. All daily observations and interpolations are summed across the season. Because fish seen on day $ii+1$ may include fish seen on day ii, the sum of all daily observations and interpolations must be divided by some residence time for fish in the streams to account for duplicate observations. The residence time of 17.5 days which has historically been used in this calculation is from tagging data completed by National Marine Fisheries Service on Olsen Creek in the early 1960's. Since observer bias does occur and since both observer bias and stream life are stream specific, adjusted totals in this table may be used for interannual comparisons but should not be interpreted as the true escapement.





Appendix E.7. Current year and historic weekly pink salmon escapement performance of index spawning streams, Prince William Sound, 2000.



Appendix E.8. Pink salmon catch and escapement, even years (1970 -2000), and odd years (1969 -1999), Prince William Sound, Alaska.

Apppendix E.9. Chum salmon harvests and escapement indices, including hatchery sales harvests and broodstock, Prince William Sound, 1971 - 2000.

	CHUM SALMON ESCAPEMENTS[a]									Hatchery		Common Property	
Year	Eastern	Northern	Coghill	Northwestern	Eshamy	Southwestern	Montague	Southeastern	Total	Sales	Brood	Catch[b]	Total Run[c]
71	49,730	11,870	6,600	5,600	100	1,430	27,990	6,450	109,770			574,265	684,035
72	112,950	70,760	28,160	22,980	0	4,010	3,340	26,990	269,190			45,370	314,560
73	213,170	140,030	72,610	13,250	0	1,020	3,110	48,080	491,270			729,839	1,221,109
74	72,010	55,510	29,280	6,580	0	240	80	3,200	166,900			88,544	255,444
1975	30,040	8,910	3,640	430	0	1,280	140	2,850	47,290			100,479	147,769
76	16,260	29,430	25,670	8,300	0	90	0	770	80,520			370,478	450,998
77	47,880	48,600	43,940	10,090	0	700	0	8,280	159,490			575,839	735,329
78	90,250	27,480	18,160	12,940	0	790	0	6,550	156,170			485,147	641,317
79	42,630	17,320	6,330	8,770	0	90	0	5,140	80,280			324,040	404,320
1980	26,720	27,880	23,340	3,060	0	2,040	70	6,710	89,820	6		412,948	502,774
81	71,560	28,670	2,050	15,130	0	710	0	16,010	134,130	118		1,745,869	1,880,117
82	146,120	68,580	22,130	21,880	0	1,530	0	25,260	285,500	0	86,200	1,335,368	1,707,068
83	143,800	85,720	61,410	31,660	340	3,170	0	21,410	347,510	0	44,000	1,030,546	1,422,056
84	129,190	59,080	19,690	7,920	0	20	0	8,650	224,550	4,886	3,000	1,196,785	1,429,221
1985	111,310	33,410	22,140	13,290	0	620	0	4,470	185,240	3,840	0	1,302,090	1,491,170
86	126,690	50,740	13,140	17,420	0	1,890	0	8,830	218,710	20,683	12,523	1,662,366	1,914,282
87	183,620	38,700	24,510	26,460	0	1,690	0	44,020	319,000	2,549	15,574	1,902,063	2,239,186
88	258,560	75,420	39,240	40,780	0	2,350	500	66,930	483,780	42,694	108,271	1,792,616	2,427,361
89	112,080	46,470	22,680	27,430	320	11,690	0	22,640	243,310	129,551	74,513	862,551	1,309,925
1990	115,100	112,480	26,020	37,020	0	80	1,050	7,275	299,025	24,554	107,284	935,284	1,366,147
91	86,360	19,080	6,070	8,960	0	2,800	925	9,203	133,398	13,471	114,814	318,435	580,118
92	48,804	12,903	10,003	11,072	300	2,940	783	3,881	90,686	57,392	183,940	271,176	603,194
93	54,102	24,975	8,430	18,966	0	1,300	30	19,172	126,975	475,148	140,330	706,196	1,448,649
94	40,476	23,942	14,176	12,992	100	2,225	0	4,057	97,968	380,365	114,654	677,848	1,270,835
1995	75,655	28,899	11,596	4,883	0	2,250	1,000	23,200	147,483	231,539	172,542	486,510	1,038,074
96	137,908	55,568	19,669	24,405	0	2,231	5,216	47,334	292,331	1,066,705	253,751	1,011,291	2,624,078
97	93,146	19,429	3,101	8,387	0	800	4,000	43,274	172,137	811,179	178,933	1,413,546	2,575,795
98	86,227	28,867	22,764	7,553	0	1,602	10,690	52,103	209,806	519,215	179,875	747,672	1,656,568
99	242,713	36,691	5,057	4,544	0	2,393	8,725	36,181	336,304	777,180	207,073	2,186,658	3,507,215
2000	196,253	23,655	20,488	10,150	16	11,440	66,202	34,969	363,173	1,729,876	85,441	3,428,521	5,607,011
1965-99 AVG	95,045	39,672	19,412	13,240	33	1,866	2,984	18,936	191,189	228,054	110,960	773,951	1,152,522

[a]Coghill and Northwestern escapement figures correspond to current district boundaries.

[b]Includes the common property harvest of both wild and hatchery stocks. Does not include hatchery sales harvests.

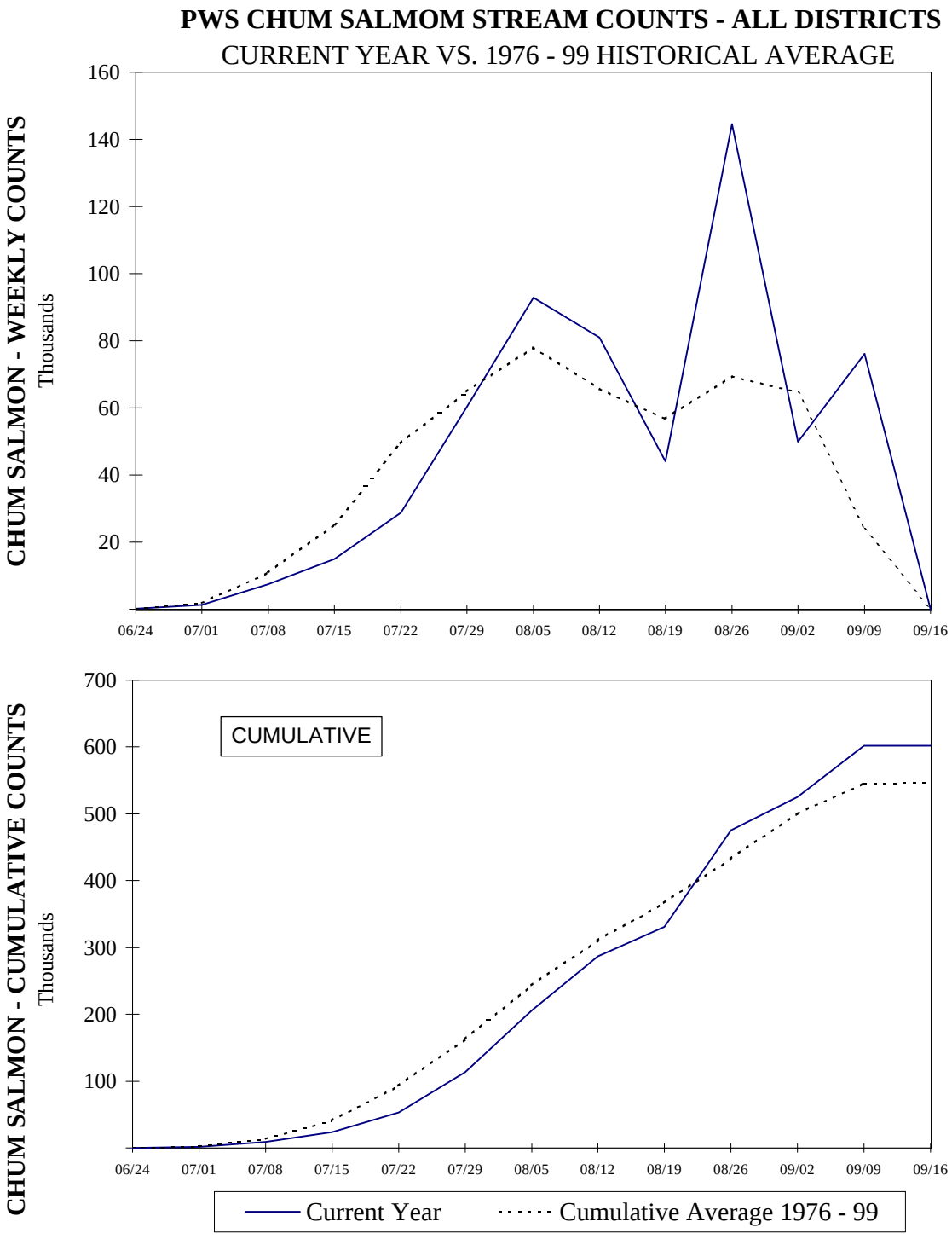
[c]Represents the sum of the common property catch, hatchery sales and brood, plus the escapement index. Does not account for wild stock escapement into non-index streams.

Appendix E.10. Weekly aerial estimates of chum salmon escapement by statistical area, Prince William Sound, 2000.

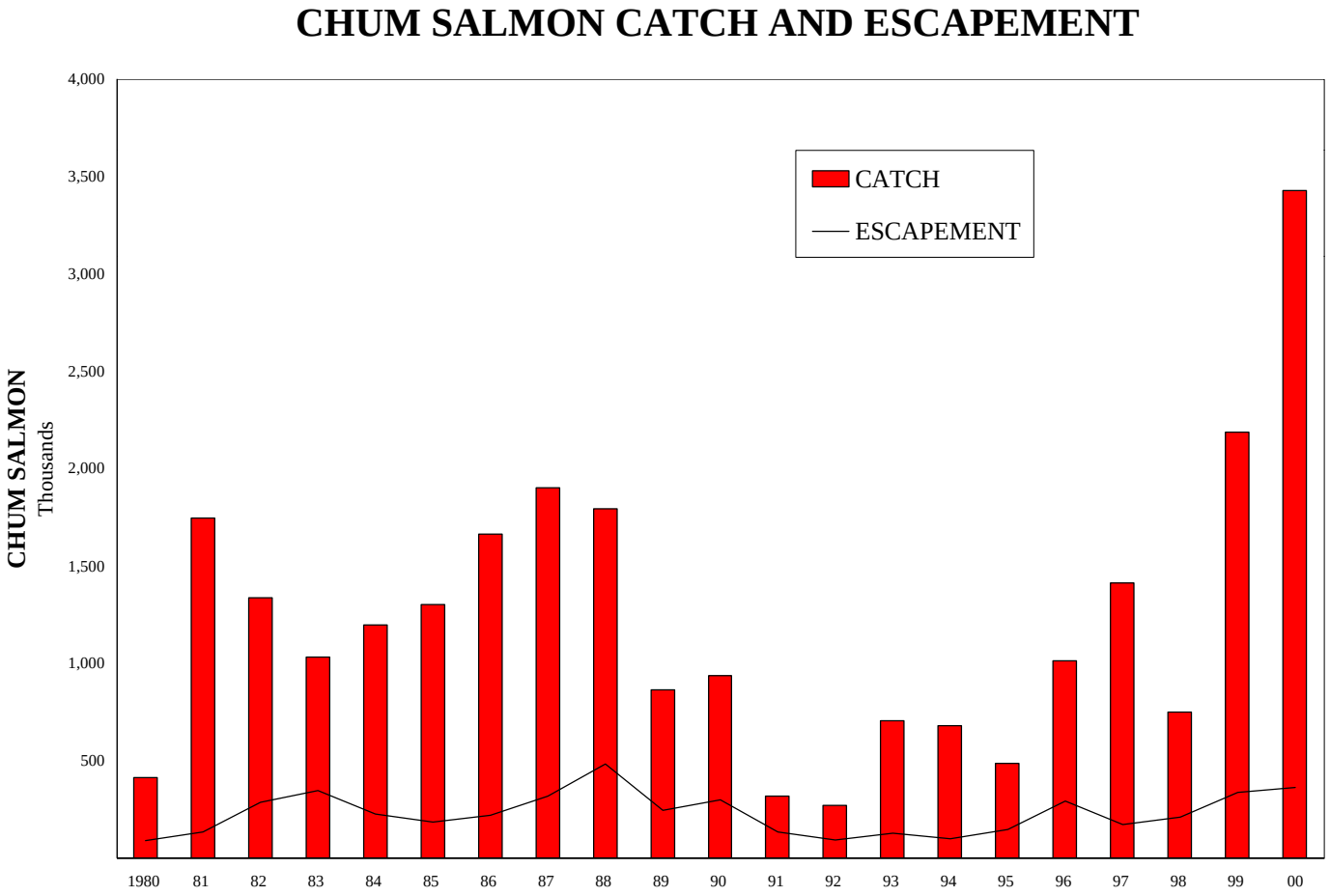
Survey Location		Week Ending Dates[a] 06/24	07/01	07/08	07/15	07/22	07/29	08/05	08/12	08/19	08/26	09/02	09/09	09/16	Adjusted Total[b]
Orca Inlet	22110	NS	NS	0	100	NS	2,010	200	4,000	1,000	1,500	500	0	NS	5,661
Simpson & Sheep Bay	22120	2	50	0	200	800	1,700	3,400	4,050	NS	1,100	NS	100	NS	6,874
Port Gravina	22130	150	1,005	3,400	5,210	7,600	15,600	18,950	11,550	NS	37,850	NS	17,500	NS	66,862
Port Fidalgo	22140	0	200	700	1,800	2,910	2,300	12,000	3,649	NS	34,600	NS	48,500	NS	79,080
Valdez Arm	22150	20	20	1,300	2,700	9,900	5,000	4,350	4,775	NS	15,300	NS	10,000	NS	37,776
Port Valdez	22161	NS	NS	NS	NS	NS	0	0	0	NS	0	NS	NS	NS	0
Eastern District Total		172	1,275	5,400	10,010	21,210	26,610	38,900	28,024	1,000	90,350	500	76,100	NS	196,253
Columbia & Long Bay	22210	0	0	550	1,100	1,000	4,600	4,020	1,405	NS	1,600	NS	0	2	6,633
Wells Bay & Unakwik Inlet	22220	35	0	500	2,000	3,200	7,960	9,560	7,270	350	308	100	0	0	14,729
Eaglek Bay	22230	NS	NS	NS	NS	NS	1,300	1,430	550	0	0	50	NS	0	2,293
Northern District Total		35	0	1,050	3,100	4,200	13,860	15,010	9,225	350	1,908	150	0	2	23,655
Upper Unakwik Inlet	22910	NS	NS	NS	NS	NS	0	0	0	0	0	0	NS	0	0
Unakwik District (229) Total		NS	NS	NS	NS	NS	0	0	0	0	0	0	NS	0	0
West Side Port Wells	22310	NS	NS	NS	NS	NS	1,556	2,725	5,500	2,050	500	NS	NS	0	6,703
Esther Passage	22320	NS	NS	NS	NS	NS	0	0	0	0	0	0	NS	0	0
College Fiord	22330	NS	NS	NS	NS	NS	50	1,200	10,000	10,000	6,000	2,000	NS	2	13,785
Coghill District Total		NS	NS	NS	NS	NS	1,606	3,925	15,500	12,050	6,500	2,000	NS	2	20,488
Passage Canal & Cochrane	22410	NS	NS	NS	NS	NS	2,550	2,006	5,000	710	0	NS	NS	0	6,444
Culross Passage	22430	NS	NS	NS	NS	NS	0	0	100	0	0	NS	NS	0	100
Port Nellie Juan	22440	NS	NS	NS	NS	NS	156	500	3,600	0	NS	NS	NS	0	3,606
Northwestern District Total		NS	NS	NS	NS	NS	2,706	2,506	8,700	710	0	NS	NS	0	10,150
Crafton/Eshamy	22530	NS	NS	NS	NS	NS	16	0	0	0	0	NS	NS	0	16
Eshamy District Total		NS	NS	NS	NS	NS	16	0	0	0	0	NS	NS	0	16
Chenega Is. & Dangerous Passage	22620	NS	NS	NS	NS	1,509	3,750	NS	3,260	3,200	1,000	3,000	NS	0	8,390
East Knight Is.	22630	NS	NS	NS	NS	0	0	100	NS	0	0	0	NS	0	100
Bainbridge & Latouche Passage	22640	NS	NS	NS	NS	1,602	770	NS	0	0	0	0	NS	0	1,950
Port Bainbridge	22650	NS	NS	NS	NS	0	200	NS	1,000	0	0	0	NS	0	1,000
Southwestern District Total		NS	NS	NS	NS	3,111	4,720	100	4,260	3,200	1,000	3,000	NS	0	11,440
Montague Strait	22710	NS	NS	NS	NS	22	820	23,250	NS	5,600	13,600	23,100	NS	NS	43,383
Green Island	22720	NS	NS	NS	NS	254	500	9,210	NS	7,000	15,200	16,100	NS	NS	22,819
Montague District Total		NS	NS	NS	NS	276	1,320	32,460	NS	12,600	28,800	39,200	NS	NS	66,202
Orca Is. & East Hawkins	22810	NS	NS	0	0	NS	0	NS	0	0	0	0	NS	NS	0
Hawkins Cutoff	22820	NS	NS	0	0	NS	1,650	NS	2,200	3,500	1,400	NS	NS	NS	5,655
North Hawkins & Canoe Passage	22830	NS	NS	0	0	NS	0	NS	50	0	0	0	NS	NS	50
Double Bay	22840	NS	NS	0	20	NS	1,085	NS	2,310	2,500	1,810	500	NS	NS	4,690
Johnstone Point	22850	NS	NS	150	200	NS	150	NS	550	250	250	0	NS	NS	1,020
Port Etches	22860	NS	NS	900	1,700	NS	6,600	NS	10,150	7,850	12,550	4,600	NS	NS	23,554
Southeastern District Total		NS	NS	1,050	1,920	NS	9,485	NS	15,260	14,100	16,010	5,100	NS	NS	34,969
TOTAL OF 9 DISTRICTS		207	1,275	7,500	15,030	28,797	60,323	92,901	80,969	44,010	144,568	49,950	76,100	4	363,173

[a]There are a total of 209 streams included in the systematic aerial survey program. The survey program commences in the Eastern District where the earliest escapements in the Sound occur. Weather and conditions permitting, each stream is flown weekly. Failure to fly a survey due to run timing or bad survey conditions is denoted by NS (no survey). A notation of NC (no count) occurs when a stream is flown but no count is possible because of survey conditions (ie. water clarity). During the peak of the pink salmon run many streams are flown twice weekly to provide fisheries managers with more timely escapement data. In cases where more than one survey per week was flown the weekly observation shown in this table is the average of the two counts if observing conditions during both were good or, the maximum of the two counts if conditions during the minimum count were poor.

[b]The adjusted total is an escapement estimate based a geometric method used since the inception of the systematic survey program in the early 1960's. In this method, aerial observers are assumed to count without error or bias. Linear interpolations between observations are used to estimate numbers of fish in the stream on days when no surveys are flown. All daily observations and interpolations are summed across the season. Because fish seen on day $ii+1$ may include fish seen on day ii, the sum of all daily observations and interpolations must be divided by some residence time for fish in the streams to account for duplicate observations. The residence time of 17.5 days which has historically been used in this calculation is from tagging data completed by National Marine Fisheries Service on Olsen Creek in the early 1960's. Since observer bias does occur and since both observer bias and stream life are stream specific, adjusted totals in this table may be used for interannual comparisons but should not be interpreted as the true escapement.



Appendix E.11. Current year and historical weekly chum salmon escapement performance from index spawning streams, Prince William Sound, 2000.



Appendix E.12. Chum salmon catch and escapement, Prince William Sound, 1980 - 2000.

Appendix E.13. Sockeye salmon escapement counts from selected systems, Prince William Sound, 2000.

Stream Name[a]	Stream Number	Weekly Count (week ending dates)									
		07/15	07/22	07/29	08/05	08/12	08/19	08/26	09/02	09/09	09/16
Billy's Hole	218	50	50	60	700	450	NS	200	NS	0	8
Wells River	234	0	0	0	1	0	NS	0	NS	0	0
Cowpen Creek	242	NS	NS	100	100	100	6	100	200	NS	500
Miner's River	244	NS	NS	550	525	450	550	350	200	NS	50
Red Creek	300	NS	NS	NS	75	50	200	0	50	NS	0
Coghill River	322	NS	NS	400	0	0	0	0	0	NS	0
Halferty Creek	454	NS	NS	0	0	0	0	0	NS	NS	25
Cochrane Creek	461	NS	NS	0	0	0	0	0	NS	NS	25
Shrode Creek	476	NS	NS	500	500	450	750	0	NS	NS	625
Gumboot Creek	507	NS	NS	75	0	0	0	0	NS	NS	0
Eshamy River	511	NS	NS	200	500	0	0	0	NS	NS	100
Jackpot River	608	NS	1,200	600	NS	600	400	300	500	NS	75
Bainbridge Creek	630	NS	1,050	50	NS	150	200	200	0	NS	100

[a]Counts contained in this table are obtained in conjunction with the regular pink and chum aerial survey program. Many of these sockeye systems are difficult to survey by air, thus the counts do not necessarily represent total live abundance at a particular time.

Appendix E.14 Estimated age and sex composition of Prince William Sound commercial chum salmon catches, by district, 2000.

		Brood Year and Age Class				
		1997	1996	1995	1994	
		0.2	0.3	0.4	0.5	Total
Coghill District						
Strata Combined:	05/27 - 09/12					
Sampling dates:	06/03 - 07/08					
Sample size:	2373					
Female	Percentage of sample	0.4	54.6	5.5	0.1	60.6
	Number in catch	6,313	898,422	90,322	1,905	996,962
Male	Percentage of sample	0.1	34.3	4.7	0.2	39.4
	Number in catch	1,229	564,974	77,503	4,019	647,724
Total	Percentage of sample	0.5	89.0	10.2	0.4	100.0
	Number in catch [a]	7,542	1,463,849	167,824	5,924	1,645,139
	Standard error	2,154	11,358	11,057	2,041	
Montague District						
Strata Combined:	06/01 - 07/21					
Sampling dates:	06/13 - 06/27					
Sample size:	1183					
Female	Percentage of sample	0.2	53.9	7.2	0.5	61.9
	Number in catch	2,278	535,191	71,855	5,053	614,377
Male	Percentage of sample	0.1	32.6	5.0	0.4	38.1
	Number in catch	687	323,952	49,579	3,658	377,876
Total	Percentage of sample	0.3	86.6	12.2	0.9	100.0
	Number in catch	2,965	859,143	121,434	8,711	992,253
	Standard error	1,492	9,910	9,527	2,760	
All Districts combined						
Strata Combined:	05/27 - 09/12					
Sampling dates:	06/03 - 07/08					
Sample size:	3,556					
Female	Percentage of sample	0.3	54.4	6.1	0.3	61.1
	Number in catch	8,591	1,433,613	162,177	6,958	1,611,339
Male	Percentage of sample	0.1	33.7	4.8	0.3	38.9
	Number in catch	1,915	888,926	127,082	7,677	1,025,600
Total	Percentage of sample	0.4	88.1	11.0	0.6	100.0
	Number in catch	10,507	2,322,992	289,259	14,635	2,637,392
	Standard error	2,620	15,074	14,595	3,432	

[a] Includes mixed drift gillnet and purse seine caught fish.

Appendix E.15. Summary of periods, dates, hours open, and emergency orders issued by district, for the commercial purse seine salmon fishery, Prince William Sound, 2000. See Appendix C.11. for Unakwik District openings.

Eastern (221)		Northern (222)		Coghill (223)		Northwestern (224)		Southwestern (226)		Montague (227)		Southeastern (228)		
Dates	Hours Open	Dates	Hours Open	Dates	Hours Open	Dates	Hours Open	Dates	Hours Open	Dates	Hours Open	Dates	Hours Open	Emergency Orders Issued
								06/01-06/04	84 [a]	06/01-06/04	84 [a]			2-F-E-05-00
								06/05-06/11	156 [a]	06/05-06/11	156 [a]			2-F-E-05-00
								06/12-06/18	156 [a]	06/12-06/18	156 [a]			2-F-E-05-00
								06/19-06/25	156 [a]	06/19-06/25	156 [a]			2-F-E-05-00
								06/26-07/02	156 [a]	06/26-07/02	156 [a]			2-F-E-05-00
06/30	12 [a]													2-F-E-26-00
								07/03-07/09	156 [a]	07/03-07/09	156 [a]			2-F-E-05-00
07/04	12 [b]													2-F-E-27-00
07/06	12 [c]													2-F-E-28-00
07/09	12 [c]													2-F-E-29-00
								07/10-07/16	156 [a]	07/10-07/16	120 [a]			2-F-E-05-00
07/11	12 [c]													2-F-E-30-00
07/13	12 [d]													2-F-E-31-00
07/15	14 [e]											07/15	12 [a]	2-F-E-32-00
								07/17-07/2	156 [a]					2-F-E-05-00
07/17	12 [f]											07/17	12 [a]	2-F-E-33-00
07/21	12 [g]									07/21	12 [b]	07/21	12 [b]	2-F-E-34-00
				07/21	20 [a]									2-F-E-40-00
								07/24-07/2	36 [a]					2-F-E-45-00
		07/26	12 [a]			07/26	12 [a]	07/26	12 [b]			07/26	12 [c]	2-F-E-46-00
07/26-07/27	36 [h]													2-F-E-46-00
07/28-07/29	36 [i]							07/28-07/2	36 [c]					2-F-E-47-00
07/30-07/31	36 [i]													2-F-E-48-00
08/01	12 [j]	08/01	12 [b]					08/01	12 [d]			08/01	12 [b]	2-F-E-49-00
08/05	12 [k]	08/05	12 [c]					08/05	12 [e]			08/05	12 [b]	2-F-E-50-00
08/07	12 [k]	08/07	12 [d]					08/07	12 [f]			08/07	12 [b]	2-F-E-51-00
08/09	12 [l]	08/09	12 [e]					08/09	12 [g]			08/09	12 [b]	2-F-E-52-00
08/12	12 [l]	08/12	12 [e]					08/12	12 [g]			08/12	12 [b]	2-F-E-55-00
08/15	12 [m]											08/15	12 [c]	2-F-E-56-00
08/17	12 [n]	08/17	12 [f]					08/17	12 [g]			08/17	12 [b]	2-F-E-65-00
		08/19	12 [g]	08/19	12 [b]			08/19	12 [h]					2-F-E-66-00
		08/21	12 [g]	08/21	12 [c]			08/21	12 [h]					2-F-E-67-00
		08/23	12 [h]					08/23	12 [h]	08/23	12 [c]			2-F-E-68-00
				08/23-08/2	36 [d]									2-F-E-68-00
08/25	12 [o]	08/25	12 [i]							08/25	12 [c]			2-F-E-69-00
				08/25-08/2	36 [d]			08/25-08/2	36 [i]					2-F-E-69-00
08/27	12 [o]													2-F-E-70-00
		08/27-08/2	36 [j]	08/27-08/2	36 [d]			08/27-08/2	36 [j]					2-F-E-70-00
08/29	12 [o]													2-F-E-71-00
		08/29-08/3	36 [k]	08/29-08/3	36 [e]			08/29-08/3	36 [j]					2-F-E-71-00
08/31	12 [o]													2-F-E-76-00
		08/31-09/01	36 [l]	08/31-09/01	36 [f]			08/31-09/01	36 [k]					2-F-E-76-00
		09/02-09/0	84 [m]	09/02-09/0	84 [f]			09/02-09/0	84 [l]					2-F-E-77-00
09/06-09/07	36 [p]													2-F-E-78-00
		09/06-09/09	84 [m]	09/06-09/09	84 [f]			09/06-09/09	84 [l]					2-F-E-78-00
09/08-09/09	36 [p]													2-F-E-78-00
09/10-09/13	84 [p]	09/10-09/13	84 [m]					09/10-09/13	84 [l]					2-F-E-79-00
				09/11-09/12	36 [f]									2-F-E-79-00
								09/14-09/16	60 [m]					2-F-E-80-00
09/14-09/17	84 [p]	09/14-09/17	84 [n]											2-F-E-80-00
								09/17-09/24	180 [n]					2-F-E-81-00
09/18-09/24	156 [p]	09/18-09/24	156 [n]	09/18-09/24	156 [g]									2-F-E-81-00. 2-F-E-86-00
		09/25-10/01	156 [r]	09/25-10/01	156 [s]			09/25-10/01	156 [r]					2-F-E-82-00, 2 F-E-86-00
				10/02-10/08	156 [s]									2-F-E-86-00
				10/09-10/15	148 [r]									2-F-E-91-00
				10/16-10/22	156 [r]									2-F-E-91-00

Eastern District

[a] In the Eastern District, only the waters south of the latitude of Black Point were open. All other anadromous stream closures remained in effect.

[r] The Eastern District, including the waters of the Valdez Narrows Subdistrict west of 146° 30.62' W. longitude were open. The waters of Jack Bay, Sawmill Bay and Galena Bay inside the yellow Salmon Harvest Task Force (SHTF) markers were closed.

[s] Waters of the Eastern District north of a line from Potato Point to Entrance Pt. and west of 146° 22.67' W. longitude were open from 8:00 a.m. to 12:00 noon, after noon the remaining Eastern District waters south of the Entrance Pt. - Potato Pt. boundary were open. The waters of Jack Bay, Sawmill Bay, Galena Bay and Sheep Bay inside the yellow SHTF markers were closed.

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[u] Eastern District waters, including the waters west of a line from the longitude of the grain elevators on the north shore of Port Valdez to the brown oil boom container van stationed on the shoreline between Solomon Gulch Hatchery (SGH) and Allison Point were open. In addition, all waters of the Valdez small boat harbor all waters within 50 yards of the entrance to the harbor were closed. The waters of Galena Bay and Sheep Bay inside the yellow SHTF markers were closed.

[v] The Eastern District, including the waters of the Valdez Narrows Subdistrict west of 146° 30.62' W. longitude were open. The waters of Sawmill Bay, Galena Bay and Sheep Bay inside the yellow SHTF markers were closed.

[t] In the Eastern District, only the waters south of the latitude of Black Point were open.
Waters of Sheep Bay, inside the yellow SHTF markers, remained closed.
All other anadromous stream closures remained in effect.

[g] Eastern District waters south of a line from Entrance Point to Potato Point were open. The waters of Sawmill Bay, St. Matthews Bay, Galena Bay, Olsen Bay, and Sheep Bay inside the yellow SHTF markers were closed.

[h] Waters of the Eastern District north of a line from Potato Point to Entrance Pt. and west of 146° 22.67' W. longitude were open for 36 hours. Eastern District waters south of the Entrance Pt. - Potato Pt. boundary were open for 12 hours. The waters of St. Matthews Bay, Olsen Bay, Sawmill Bay, Galena Bay and Sheep Bay inside the yellow SHTF markers were closed.

[i] Waters of the Eastern District north of a line from Potato Point to Entrance Pt. and west of 146° 22.67' W. longitude were open.

[j] Eastern District waters south of a line from Entrance Point to Potato Point excluding the waters of Sheep Bay inside the yellow SHTF markers, were open. At 1:00 p.m. August 1, the waters of Sheep Bay inside the yellow SHTF markers and waters of Beartrap Bay inside the regulatory closed waters markers were open.,

[k] Eastern District waters south of a line from Entrance Point to Potato Point were open. The waters of Jack Bay, St. Matthews Bay, Galena Bay, Olsen Bay, Beartrap Bay, and Sheep Bay inside the yellow SHTF markers were closed.

[l] Eastern District waters south of a line from Entrance Point to Potato Point were open. The waters of Jack Bay, St. Matthews Bay, Sawmill Bay, Port Fidalgo, Olsen Bay, Beartrap Bay, and Sheep Bay inside the yellow SHTF markers were closed.

[m] In the Eastern District, waters south of a line from Entrance Point to Potato Point and north of 60° 50' N. latitude were open. The waters of Sheep Bay, Beartrap Bay, Sawmill Bay and Jack Bay inside the yellow SHTF markers were closed.

[n] Eastern District waters south of a line from Entrance Point to Potato Point were open. The waters of Jack Bay, Sawmill Bay, Port Fidalgo, Beartrap Bay, and Sheep Bay inside the yellow SHTF markers were closed.

[o] Waters of the Eastern District south of a line from Entrance Point to Potato Point and north of the latitude of Black Point were open. The waters of Galena Bay, Jack Bay, and Sawmill Bay inside the yellow SHTF markers remained closed.

[p] Waters of the Eastern District north of a line from Entrance Point to Potato Point and west of a line from the longitude of the grain elevators on the north shore of Port Valdez to the brown oil boom container van located between Allison Point and Solomon Gulch Hatchery were open. All waters of the Valdez small boat harbor and all waters within 50 yards of the entrance to the harbor were closed.

Northern District

[a] Northern District waters, excluding the Perry Island Subdistrict, and Jonah, Siwash, and Cedar Bays, inside the yellow SHTF markers, and the waters north of 60° 59' N. latitude, were open.

[b] Northern District waters, west of the longitude of Granite Point, were open. Waters of the Perry Island Subdistrict, waters inside the yellow SHTF markers in Jonah Bay and Siwash Bay, and the Cannery Creek Hatchery (CCH) SHA and THA were closed.

[c] Waters of the Northern District west of the longitude of Granite Point and east of the longitude of Pellew Point, including the waters within one nautical mile of Naked Island, were open. Waters of Jonah Bay and Siwash Bay, inside the yellow SHTF markers, and the waters of the CCH SHA and THA remained closed.

[d] In the Northern District, waters west of the longitude of Granite Point and east of 147° 40' W. longitude including the waters within one nautical mile of Naked Island were open. Waters north of 60° 56.96' N. latitude inside Unakwik Inlet and Cedar Bay, Wells Bay and Granite Bay inside the yellow SHTF markers remained closed.

[e] In the Northern District, waters west of the longitude of Granite Point and east of 147° 40' W. longitude, were open. Waters north of Payday Point in Unakwik Inlet and Cedar Bay, Wells Bay and Granite Bay, inside the yellow SHTF markers, remained closed.

[f] In the Northern District, waters west of the longitude of Granite Point and east of 147° 40' W. longitude, were open. Waters north of 60° 56.96' N. latitude inside Unakwik Inlet and Cedar Bay, Wells Bay and Granite Bay inside the yellow SHTF markers remained closed.

[g] In the Northern District, waters west of the longitude of Granite Point and east of 147° 40' W. longitude and in waters of the Perry Island Subdistrict west of 147° 51.12' W. longitude were open. Within Hidden Bay, anadromous stream closures inside the yellow markers were not in effect. Waters of the CCH SHA, THA and waters of Cedar Bay, Wells Bay, Granite Bay, Jonah Bay and Siwash Bay inside the yellow SHTF markers remained closed.

[h] Northern District waters west of the longitude of Granite Point and east of 147° 40' W. longitude and in waters of the Perry Island Subdistrict west of 147° 51.12" W. longitude were open. Within Hidden Bay, anadromous stream closures inside the yellow markers were not in effect. Waters north of the latitude of Payday Point and waters of Cedar Bay, Wells Bay, and Granite Bay inside the yellow SHTF markers remained closed.

[i] In the Northern District, waters west of the longitude of Granite Point and east of 147° 40' W. longitude and in waters of the Perry Island Subdistrict west of 147° 51.12" W. longitude were open. Within Hidden Bay, anadromous stream closures inside the yellow markers were not in effect. Waters north of 60° 56.96' N. latitude and waters of Cedar Bay, Wells Bay, and Granite Bay inside the yellow SHTF markers remained closed.

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[J]Waters of the Perry Island Subdistrict west of 147° 51.12' W. longitude were open for 12 hours. Within Hidden Bay anadromous stream closures inside the yellow markers were not in effect. In addition, waters south of 60° 56.96' N. latitude in Unakwik Inlet and north of the latitude of Payday Point were open for 36 hours.

[K]Waters of the Perry Island Subdistrict west of 147° 51.12' W. longitude were open for 12 hours. In addition, waters south of 60° 59' N. latitude in Unakwik Inlet and north of the latitude of Payday Point were open for 36 hours.

[L]Waters of the Perry Island Subdistrict west of 147° 51.12' W. longitude were open for 12 hours.
Waters north of the latitude of Payday Point in Unakwik Inlet were open for 36 hours.
Waters of the CCH THA and SHA and inside the yellow SHTF markers in Jonah Bay and Siwash Bay were closed.

[M] Northern District waters north of the latitude of Payday Point were open. Waters of the CCH THA and SHA and inside the yellow SHTF markers in Jonah Bay and Siwash Bay were closed.

[N]Only the waters of the CCH SHA and THA were open up to a line 50 feet below the lower weir in Cannery Creek.

Coghill District

[O]In the Coghill District, only the Esther Subdistrict was open. The Wally H. Noerenberg Hatchery (WNH) THA and SHA was open up to a line of buoys in front of the hatchery barrier seine. All other regulatory closed waters remained in effect.

[P]Waters of the Coghill District, excluding the WNH THA and SHA was open. Waters of Bettles Bay, Hummer Bay and Pigot Bay inside the yellow SHTF markers in the bays was also closed. All other regulatory closed waters remained in effect.

[Q]Waters of the Coghill District, excluding the WNH SHA, was open. Waters of Bettles Bay, Hummer Bay and Pigot Bay inside the yellow SHTF markers in the bays remained closed. All other regulatory closed waters remained in effect.

[R]All waters of the Coghill District, excluding waters of Bettles Bay, Hummer Bay, and Pigot Bay inside the yellow SHTF markers, were open for 12 hours. In addition, waters of the WNH SHA, up to a line of buoys outside the WNH barrier seine and waters of the THA were open for 36 hours.

[S]The Esther Subdistrict,WNH THA, and SHA south of a line of buoys near the barrier were open.

[T]The waters of the Esther Subdistrict and WNH THA were open.

[U]Within the Esther Subdistrict, the WNH THA was open through 8:00 a.m., September 21. Effective 8:00 a.m., September 21 area open to commercial fishing was expanded to include the WNH SHA up to a line within 50 feet of the net pen frames.

[V]The Esther Subdistrict, including the WNH THA and SHA, were open.

Northwestern District

[W] Waters of the Northwestern District, excluding the waters inside the yellow Salmon Harvest Task Force (SHTF) markers in Port Nellie Juan and north of the yellow SHTF markers at the southern entrance to Culross Passage, were open.

Southwestern District

[X]In the Southwestern District, only the Armin F. Koenig (AFK) Hatchery SHA was open.
Anadromous stream closures in the Southwestern District were not in effect.

[Y]Waters of the Point Elrington Subdistrict, Port San Juan Subdistrict and waters east of Knight Island south of 60° 20' N. latitude and north of the latitude of Point Helen were open. In addition, waters of the AFK Hatchery SHA and THA up to a line of buoys located outside of the hatchery broodstock barrier seine were open.

[Z]Within the Southwestern District, only the AFK Hatchery THA and SHA, up to a line of buoys outside the hatchery broodstock barrier seine were open.

[a]In the Southwestern District, only the Port San Juan and Point Elrington Subdistricts were open.

[b]In the Southwestern District, only the Port San Juan and Point Elrington Subdistricts and waters within one nautical mile of Latouche Island were open. AFK Hatchery SHA and THA were not open.

[c]Within the Southwestern District, the Port San Juan and Point Elrington Subdistricts, waters east of Knight Island south of 60° 20' N. latitude and north of the latitude of Point Helen and waters within one nautical mile of Latouche Island were open. AFK Hatchery SHA and THA were not open.

[d]Within the Southwestern District, the Point Elrington Subdistrict, waters east of Knight Island south of 60° 20' N. latitude and north of the latitude of Point Helen were open. AFK Hatchery SHA and THA were not open.

[e]In the Southwestern District, only the waters south of the latitude of Dual Head near the entrance to Whale Bay at 60° 15' N. latitude and waters east of Knight Island south of 60° 22' N. latitude were open. The Port San Juan Subdistrict, AFK Hatchery SHA and THA, and waters within one nautical mile of Latouche Island remained closed.

[f]The Point Elrington Subdistrict was open for 12 hours. In addition, waters of the Port San Juan Subdistrict was open for 36 hours. The AFK Hatchery SHA and THA and remaining waters of the Southwestern District remained closed.

[g]The Point Elrington Subdistrict was open for 12 hours. In addition, waters of the Port San Juan Subdistrict The AFK Hatchery THA and SHA up to a line of buoys in front of the hatchery barrier seine were open for 36 hours.

[h]The Point Elrington Subdistrict was open for 12 hours. In addition, waters of the Port San Juan Subdistrict, including the AFK Hatchery THA was open for 36 hours. The AFK Hatchery SHA remained closed.

[i] In the Southwestern District, only the waters of the Port San Juan District, including the AFK Hatchery THA was open. The waters of the AFK Hatchery SHA and waters of the Point Elrington Subdistrict remained closed.

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Southwestern District

[mm] In the Southwestern District, only the AFK Hatchery THA was open. Anadromous stream closures in the Southwestern District were not in effect.

[nn] Within the Southwestern District, only the AFK Hatchery SHA and THA were open.

Montague District

[oo] In the Montague District, only the Port Chalmers Subdistrict was open. Anadromous stream closures and regulatory closed waters in the Port Chambers Subdistrict were not in effect.

[pp] In the Montague District, only the Port Chalmers Subdistrict was open. Regulatory closed waters in the Port Chambers Subdistrict were not in effect.

[qq] All waters of the Montague District were open. All anadromous stream closures remained in effect.

Southeastern District

[rr] In the Southeastern District, only the waters west of the longitude of the Middle Ground Buoy were open. All other regulatory closed waters remained in effect.

[ss] The entire Southeastern District was open. All other regulatory closed waters remained in effect.

[tt] In the Southeastern District, only the waters east of the longitude of the Middle Ground Buoy were open. All other regulatory closed waters remained in effect.

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APPENDIX F: HATCHERY RETURNS

Appendix F.1. Daily salmon sales harvests and sex ratios at the Wally Noerenberg Hatchery, Broodstock and sex ratio data provided by the Prince William Sound Aquaculture Corporation.

HATCHERY SALES HARVEST IN NUMBERS OF FISH			
Date	Pink Salmon % Female	Pink	Chum
06/01		0	28,270
06/02		0	4,477
06/03		0	50,737
06/04		0	28,639
06/05		0	31,369
06/06		0	28,543
06/07		0	40,494
06/08		0	54,880
06/09		0	59,134
06/10		0	39,097
06/11		0	54,153
06/12		0	41,179
06/13		0	76,181
06/14		0	150,244
06/15		0	72,880
06/16		0	64,456
06/17		0	93,439
06/18		0	76,337
06/19		0	37,427
06/20		0	41,777
06/22		0	27,983
06/23		0	14,072
06/24		0	70,680
06/25		0	37,716
06/26		0	12,599
06/27		0	56,367
06/28		0	50,086
06/29		0	62,392
06/30		0	71,691
07/01		0	56,534
07/02		0	61,615
07/03		0	39,154
07/04		0	61,033
07/06		0	22,748
07/28	8.2%	39,030	1,046
07/29	8.7%	41,992	2,581
07/30	9.1%	72,689	0
07/31	8.2%	47,134	870

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HATCHERY SALES HARVEST IN NUMBERS OF FISH

Date	Pink Salmon % Female	Pink	Chum
08/01	15.5%	61,461	486
08/02	15.4%	45,516	0
08/03	15.1%	79,357	0
08/04	18.2%	81,354	0
08/05	19.3%	118,896	0
08/06	21.3%	127,093	0
08/07	25.6%	150,315	0
08/08	26.0%	264,864	0
08/09	32.4%	311,725	0
08/10	34.6%	207,184	0
08/11	38.0%	211,015	0
08/12	37.6%	236,316	0
08/13	41.4%	160,142	0
08/14	42.7%	283,097	0
08/15	46.7%	209,103	0
08/16	49.7%	350,196	0
08/17	50.7%	147,636	0
08/18	49.4%	197,650	0
08/22	55.2%	92,467	0
Totals		3,536,232	1,723,366

SALES SUMMARY:

	Pink	Chum
Pounds Sold	13,340,767	13,674,183
Average Weights:	3.74	7.93
Roe Sales/Lbs:	4,211	9,448

BROODSTOCK SUMMARY:

	Pink	Chum	Coho
Fish spawned at hatchery	132,172	63,289	543
Green/bad/excess	36,529	21,205	29
Eggtake mortality	83,811	8,918	546
Total available broodstock	**252,512**	**93,412**	**1,118**
Estimated unharvested return	0	0	0
Estimated return to hatchery	252,512	93,412	1,118

Appendix F.2. Daily salmon sales harvests and sex ratios at the Armin F. Koernig Hatchery, 2000. Broodstock and and sex ratio data provided by the Prince William Sound Aquaculture Corporation.

HATCHERY SALES HARVESTS IN NUMBERS OF FISH

Date	Pink Salmon % Female	Pink	Chum
08/01	3.5%	25,095	0
08/02	4.6%	20,575	0
08/03	7.3%	26,347	166
08/04	6.0%	53,593	0
08/05	7.9%	37,895	0
08/06	10.4%	140,189	0
08/07	11.4%	58,859	0
08/08	15.0%	25,637	0
08/09	19.0%	44,976	0
08/10	20.5%	73,484	0
08/11	27.5%	77,588	0
08/12	29.5%	138,126	0
08/13	32.0%	106,591	0
08/14	34.8%	169,277	0
08/15	40.6%	166,216	0
08/16	40.4%	178,982	0
08/17	39.7%	41,030	0
08/18	46.7%	155,071	0
08/20	48.0%	90,832	0
08/22	48.0%	133,471	0
08/24	54.6%	254,079	0
Totals		2,017,913	166

SALES SUMMARY:	Pink	Chum
Pounds Sold	7,381,882	1,145
Average Weight:	3.66	6.90
Roe Sales	17,342	

PINK BROODSTOCK SUMMARY:	Pink
Spawned at hatchery	167,758
Excessed/green/bad	44,460
Fishway/system mortality	23,595
Total available broodstock	**235,813**
Estimated unharvested return	0
Estimated return to hatchery	235,813

Appendix F.3. Daily pink salmon sales harvests and sex ratios at the Solomon Gulch Hatchery, 2000. Sex ratios and broodstock data provided by the Valdez Fisheries Development Association, Inc.

		HATCHERY SALES HARVESTS IN NUMBERS OF FI		
	Pink Salmon			
Date	% Female	Pink	Chum	Coho
06/20		7,951	0	0
06/21		12,929	0	0
06/22	12.0%	12,782	0	0
06/23	12.0%	21,526	0	0
06/24	13.0%	35,375	194	0
06/25	14.0%	63,091	169	1
06/26	13.0%	109,903	74	0
06/27	12.0%	180,765	78	0
06/28	20.0%	305,901	0	0
06/29	18.0%	38,219	0	0
06/30	18.0%	147,887	0	0
07/01	24.0%	121,158	0	0
07/02	24.0%	246,642	0	0
07/03	20.0%	279,829	0	0
07/05	29.0%	63,569	0	0
07/06		31,818	0	0
07/07	41.0%	239,984	0	0
07/08	34.0%	374,480	0	0
07/09		59,326	0	0
07/10	39.0%	145,388	0	0
07/11		46,041	0	0
07/12	50.0%	193,018	0	0
07/14		161,660	0	0
07/16		120,595	0	0
07/17	74.0%	99,798	0	0
07/18		171,357	0	0
07/19		139,603	0	0
07/20		151,847	0	0
07/22		129,646	0	0
07/23		146,297	0	0
07/24		83,762	0	0
07/25		61,014	0	0
07/26		30,474	0	0
Totals		4,033,635	515	1

SALES SUMMARY:	pink	chum	coho
Total Pounds Sold:	13,735,335	4,538	9
Average Weights:	3.41	8.81	9.00
Roe Sales (lbs.)	9,683		19,060

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PINK BROODSTOCK SUMMARY:	
Spawned at hatchery	170,893
Green/bad/excess	131,669
System mortalities	2,391
Total available broodstock	**304,953**
Estimated creek spawners	10,535
Fish estimated remaining above weir	0
Estimated return to hatchery	315,488

COHO BROODSTOCK SUMMARY:	
Spawned at hatchery	727
Green/bad/excess	488
System mortalities	410
Total available broodstock	**1,625**
Estimated creek/bay spawners	0
Fish estimated remaining above weir	0
Estimated return to hatchery	1625

Appendix F.4. Daily pink salmon sales harvests and sex ratios at the Canner Hatchery, 2000. Broodstock and sex ratio data provided by Prince William Sound Aquaculture Corporation.

HATCHERY SALES IN NUMBERS OF FISH

Date	% Female	Pink
08/04	14.1%	7,705
08/05	12.9%	38,759
08/06	14.4%	70,934
08/07	20.0%	46,008
08/08	23.0%	128,435
08/09	29.6%	90,915
08/10	33.1%	56,533
08/11	33.3%	40,782
08/12	31.9%	123,462
08/13	40.4%	132,894
08/14	45.7%	170,714
08/15	45.2%	116,948
08/16	43.2%	130,117
08/17	45.6%	120,860
08/18	45.6%	99,987
08/19	43.8%	27,846
08/20	57.5%	107,766
08/22	52.9%	27,374
Totals		1,538,039

SALES SUMMARY:	Pink
Pounds Sold:	5,382,820
Average Weight:	3.50
Roe Sales (lbs)	9,707

PINK BROODSTOCK SUMMARY:	
Spawned at hatchery	178,540
Green/bad/excess	36,554
Mortality	65,717
Total available broodstock	**280,811**
Estimated unharvested return	0
Estimated return to hatchery	280,811

Appendix F.5. Daily salmon sales harvests at the Main Bay Hatchery, 2000. Broodstock data provided by the Prince William Sound Aquaculture Corporation.

HATCHERY SALES HARVEST IN NUMBERS OF FISH

Date	Sockeye	Chum
07/09	198	706
07/15	20	1,605
07/18	0	1,336
07/25	0	2,182
Totals	218	5,829

SALES SUMMARY:	Sockeye	Chum
Pounds Sold	1,407	5,829
Average Weights:	6.45	7.60

MAIN BAY SOCKEYE BROODSTOCK SUMMARY:

Main Bay Mid Stock/Coghill Lake	
Good	5,007
Green/bad/excess	311
System mortalities/excessed/bad	451
Estimated return to Hatchery	**5,769**

Appendix F.6 Sales harvests of salmon by species from private nonprofit hatcheries as reported on fish tickets, Prince William Sound, 1977 - 2000.

		Catch by Species [a]				
Year	Hatchery [b]	Sockeye	Coho	Pink	Chum	Total
1977	AFK			15,545		15,545
1978	AFK			114,188		114,188
1979	AFK			223,748		223,748
1980	AFK, N			346,728	6	346,734
1981	AFK			707,037	118	707,155
1982	AFK			1,354,732		1,354,732
1983	AFK			616,963		616,963
1984	AFK, SG			415,393	4,886	420,279
1985	AFK, SG			1,209,960	3,840	1,213,800
1986	AFK, SG		2,156	905,464	20,683	928,303
1987[c]	AFK, SG, E, CC		7,015	2,691,190	2,549	2,700,754
1988	AFK, SG, E		6,110	1,632,701	42,694	1,681,505
1989[d]	AFK, SG, WNH, CC, MB		52,307	7,812,373	131,362	7,996,042
1990	AFK, SG, WNH, CC		14,199	8,732,658	24,554	8,771,411
1991	AFK, SG, WNH, CC		52,625	5,955,561	13,471	6,021,657
1992	AFK, SG, WNH, CC, MB	163,086	73,530	3,049,394	57,392	3,343,402
1993	AFK, SG, WNH, CC, MB	113,738	3,259	2,212,403	475,148	2,804,548
1994	AFK, SG, WNH, CC, MB	79,541	22,454	10,521,439	380,365	11,003,799
1995	AFK, SG, WNH, CC, MB	63,326	13,248	5,100,819	231,539	5,408,932
1996[e]	AFK, SG, WNH, CC, MB	86,911	38,945	8,291,205	1,066,683	9,483,744
1997	AFK, SG, WNH, CC, MB,G	266,335	2,933	9,854,675	811,179	10,935,122
1998	AFK, SG, WNH, CC, MB,G	148,288	20,199	8,825,226	519,215	9,512,928
1999	AFK, SG, WNH, CC, GH	28,777	0	13,130,211	777,180	13,936,168
2000	AFK, SG, WNH, CC, MB	218	1	11,125,819	1,729,876	12,855,914
TOTAL		950,220	308,981	104,845,432	6,292,740	112,397,373

[a] Includes salmon harvested by private nonprofit hatcheries in Prince William Sound to generate revenues to offset operating costs. Does not include carcass sales or fish processed only for roe extraction after egg takes.

[b] Hatcheries:
AFK = Armin F. Koernig (PWSAC) (formerly Port San Juan Hatchery)
E = Esther Hatchery (PWSAC), renamed WNH in 1989
SG = Solomon Gulch Hatchery (VFDA)
N = NERKA Inc.
CC = Cannery Creek (PWSAC) (formerly operated by ADF&G)
WHN = Wally Noerenberg Hatchery (PWSAC) (formerly Esther Hatchery)
MB = Main Bay (PWSAC) (formerly operated by ADF&G)
GH = Gulkana Hatchery (Crosswind Lake Weir)(formerly operated by ADF&G)

[c] PWSAC administered a sales harvest at the state owned Cannery Creek hatchery. A majority of the coho salmon sold were carcasses and surplus brood fish from the Solomon Gulch hatchery.

[d] PWSAC administered a sales harvest at the state owned Main Bay Hatchery to harvest a surplus of chum salmon due to closure of the common property fishery.

[e] Includes 269,848 pink salmon Peter Pan Seafoods bought from VFDA and then discarded after roe salvage. Also includes approximately 250,000 chum processed by PWSAC for meal production and roe salvage.

Appendix F.7. Summary of pink and chum salmon returns to Prince William Sound hatcheries, 2000.

Pink salmon returns to P.W.S. hatcheries from otoliths[a]

Hatchery	1999 Fry Release	2000 Forecast Return	Estimated Total Return	Marine Survival	Estimated C.P.F. Contribution	Estimated Sales Harvest Contribution [b]	Escmt. and Brood [c]	Eggs Taken (millions)
Solomon Gulch	213,906,642	7,700,000	11,934,458	5.6%	7,635,581	3,983,473	315,404	231.0
A. F. Koernig	133,156,995	6,200,000	6,880,616	5.2%	4,646,469	1,998,334	235,813	162.6
Wally Noerenberg	123,869,678	5,800,000	8,753,227	7.1%	4,980,503	3,520,212	252,512	130.6
Cannery Creek	131,195,588	5,000,000	6,544,358	5.0%	4,688,206	1,575,341	280,811	152.6
Total Pink Salmon	602,128,903	24,700,000	34,112,659	5.7%	21,950,759	11,077,360	1,084,540	676.8

Chum salmon returns to P.W.S. hatcheries

Hatchery	1999 Fry Release	2000 Forecast Return	Estimated Total Return	Estimated C.P.F. Comm Catch	Sales Harvest [b]	Escmt. and Brood [c]	Eggs Taken (millions)
A.F. Koernig	0	60,000	419,600	419,600	0	0	0.0
Wally Noerenberg	76,306,351	2,450,000	3,372,396	1,555,618	1,723,366	93,412	86.5
Port Chalmers	24,045,577	640,000	992,253	992,253	0	0	0.0
Total Chum Salmon	100,351,928	3,150,000	3,791,996	1,975,218	1,723,366	93,412	86.5

[a] Contribution estimates of pink and chum salmon from PWS hatcheries are based on analysis of otolith recoveries and location of catch as reported on fish tickets.

[b] Does not include carcass sales which are part of the broodstock.

[c] Includes broodstock, overmature/green fish, holding mortalities, excess fish and fish processed for roe extraction. Does not include watershed spawners, unseen mortalities or fish remaining in the bay.

Appendix F.8. Historical catch contributions, thermally marked otolith releases, and total returns of pink salmon to Prince William Sound hatcheries, 1995 - 2001.

Solomon Gulch

Brood Year	Return Year	Fry Release	Thermal Mark Applied to Fry Release	Broodstock	Total Cost Recovery Harvest	Hatchery Contribution to CR Harvest	Hatchery Contribution to Other Harvest	Hatchery Contribution to the CPF	Total Hatchery Return	Estimated Marine Survival
1995	1997	233,088,327	233,088,327	356,271	2,431,007	2,428,010	0	4,005,264	6,789,545	2.9%
1996	1998	188,862,094	188,862,094	334,551	3,428,348	3,076,945	0	1,226,679	4,638,175	2.5%
1997	1999	195,162,163	195,162,163	581,397	4,379,659	4,354,601	0	9,465,378	14,401,376	2.5%
1998	2000	213,906,642	213,906,642	315,404	4,033,635	3,983,473	0	7,635,581	11,934,458	5.6%
1999	2001	195,763,690	195,763,690							

Armin F. Koernig

Brood Year	Return Year	Fry Release	Thermal Mark Applied to Fry Release	Broodstock	Total Cost Recovery Harvest	Hatchery Contribution to CR Harvest	Hatchery Contribution to Other Harvest	Hatchery Contribution to the CPF	Total Hatchery Return	Estimated Marine Survival
1995	1997	108,636,976	108,636,976	0	3,206,683	3,139,053	0	3,815,265	6,954,318	6.4%
1996	1998	52,384,532	52,384,532	343,978	1,634,956	1,582,038	0	5,037,454	6,963,470	13.3%
1997	1999	148,323,538	148,323,538	294,446	2,814,760	2,994,037	0	5,108,346	8,389,898	7.9%
1998	2000	133,156,995	133,156,995	235,813	2,017,913	1,998,334	0	4,646,469	6,880,616	5.2%
1999	2001	142,537,692	142,537,692							

Wally Noerenberg

Brood Year	Return Year	Fry Release	Thermal Mark Applied to Fry Release	Broodstock	Total Cost Recovery Harvest	Hatchery Contribution to CR Harvest	Hatchery Contribution to Other Harvest	Hatchery Contribution to the CPF	Total Hatchery Return	Estimated Marine Survival
1995	1997	176,431,919	176,431,919	409,455	2,280,868	2,321,255	0	3,464,254	6,194,964	3.5%
1996	1998	106,440,456	106,440,456	264,143	2,437,615	2,427,120	0	4,817,354	7,508,617	7.0%
1997	1999	103,675,208	103,675,208	274,664	3,860,431	3,861,891	0	4,828,682	8,966,850	8.6%
1998	2000	123,869,678	123,869,678	252,512	3,536,232	3,520,212	0	4,980,503	8,753,227	7.1%
1999	2001	116,069,339	116,069,339							

Cannery Creek

Brood Year	Return Year	Fry Release	Thermal Mark Applied to Fry Release	Broodstock	Total Cost Recovery Harvest	Hatchery Contribution to CR Harvest	Hatchery Contribution to Other Harvest	Hatchery Contribution to the CPF	Total Hatchery Return	Estimated Marine Survival
1995	1997	140,441,131	140,441,131	319,329	1,897,259	1,852,317	0	3,608,272	5,779,918	4.1%
1996	1998	136,838,852	136,838,852	304,945	1,324,307	1,305,144	0	4,869,014	6,479,103	4.7%
1997	1999	137,571,564	137,571,564	294,446	2,076,361	2,014,448	0	5,414,942	7,722,850	5.6%
1998	2000	131,195,588	131,195,588	280,811	1,538,039	1,575,341	0	4,688,206	6,544,358	5.0%
1999	2001	132,236,317	132,236,317							

Appendix F.9. Estimated total hatchery and wild stock production of pink salmon, Prince William Sound, 1977 - 2000.

	Total Return by Hatchery[a]								
Year[b]	Solomon Gulch (VFDA)	Armin F Koernig (PWSAC)	Wally Noerenberg (PWSAC)	Main Bay (ADF&G - PWSAC)	Cannery Cr. (ADF&G - PWSAC)	Total Hatchery Production	Total Wild Stock Component[c]	Revised Total Hatchery Production[d]	Revised Total Wild Stock Component[d]
1977		27,857				27,857	5,816,401		
1978		154,620				154,620	3,925,083		
1979		552,955				552,955	17,335,503		
1980		1,493,489			90,348	1,583,837	14,013,916		
1981		2,264,854			141,440	2,406,294	19,568,866		
1982		5,134,363		35,000	764,214	5,933,577	16,794,317		
1983	91,445	3,722,502		496,850	469,441	4,780,238	11,567,348		
1984	131,075	2,800,000		1,200,000	1,139,000	5,270,075	21,201,513		
1985	485,607	5,030,616		383,000	2,594,000	8,493,223	19,938,105		
1986	1,217,250	4,964,000		232,000	853,000	7,266,250	5,563,957		
1987	5,290,321	7,613,161	3,011,955	328,000	2,131,726	18,375,163	13,066,944		
1988	1,034,204	6,076,493	3,866,618	100,000	227,688	11,305,003	1,766,936		
1989	3,297,851	2,628,627	5,718,794	0	5,540,665	17,185,937	6,610,342	19,052,529	4,743,750
1990	8,923,567	6,809,090	13,553,591	[d]	2,534,297	31,820,545	14,418,696	33,315,579	12,923,662
1991	5,691,176	5,117,569	11,690,234	0	8,501,296	31,000,275	9,295,456	32,750,955	7,544,776
1992	1,864,031	2,391,140	2,006,127	0	1,519,716	7,781,014	2,203,701	8,579,332	1,405,383
1993	1,112,314	1,528,425	1,492,039	0	712,223	4,845,001	2,875,916	6,177,575	1,542,942
1994	12,735,021	1,744,142	6,145,508	0	9,640,886	30,265,557	9,501,683	35,100,601	4,666,639
1995	6,765,357	856,048	2,314,276	0	5,072,900	15,008,581	3,401,469	14,475,842	3,934,208
1996	6,990,211	1,766,881	5,136,516	0	6,516,672	20,410,280	8,374,327	24,284,522	4,500,085
1997	7,012,054	6,605,685	5,571,768	0	4,513,121	23,702,628	4,596,623	24,611,085	3,688,166
1998[e]	4,638,175	6,963,470	7,508,617	0	6,479,103	25,589,365	5,254,369		
1999[e]	14,401,376	8,389,898	8,966,850	0	7,722,850	39,480,974	9,426,391		
2000[e]	11,934,458	6,880,616	8,753,227	0	6,544,358	34,112,659	7,394,140		

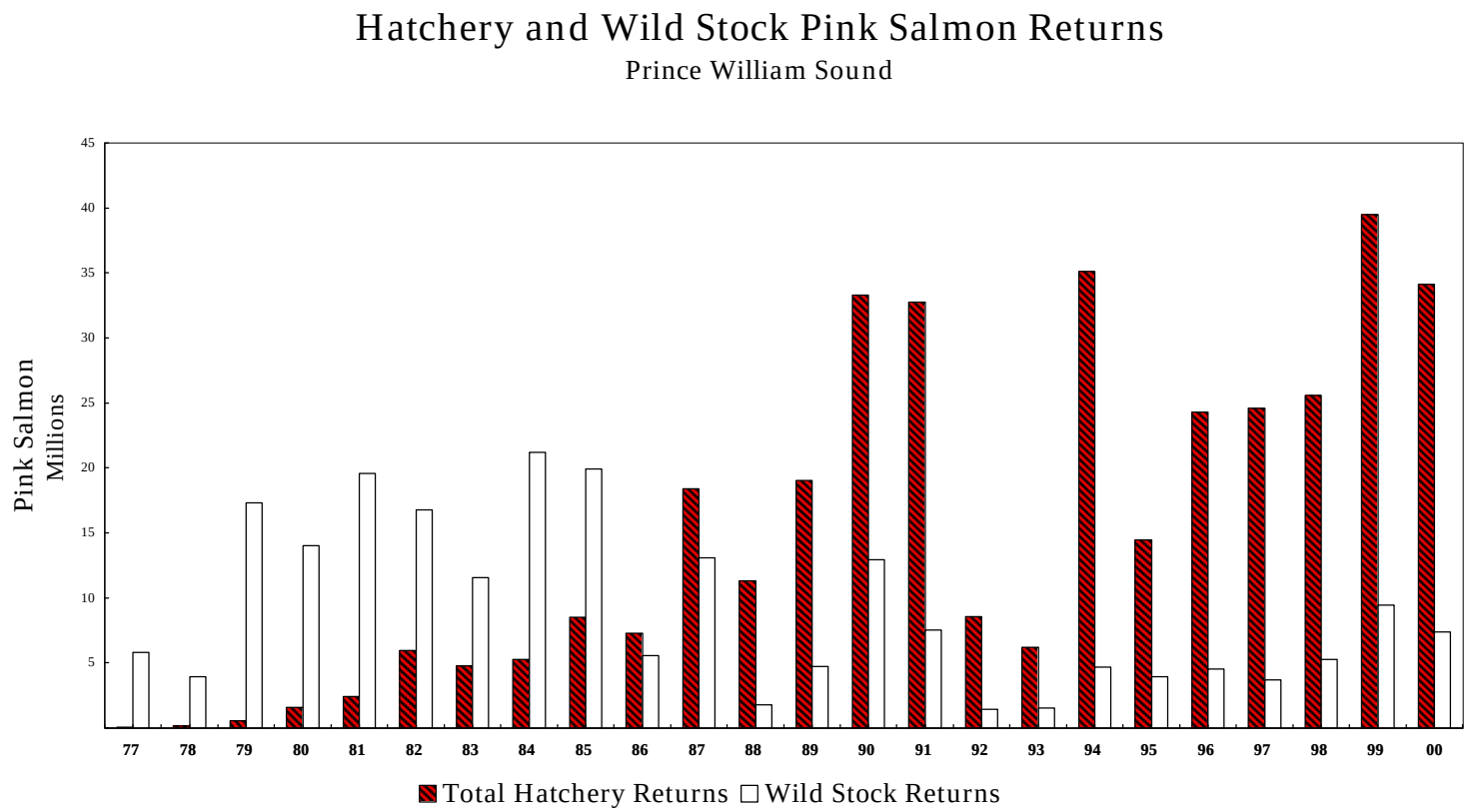
[a] Prior to 1987, there was no definitive or statistically valid method of separating hatchery and wild stock composition in the commercial catch. The above estimates are based on presumed wild stock exploitation rates which in turn are determined by the wild stock escapement estimate. The wild stock escapement index is only a minimum estimate. The true wild stock escapement is not known. Consequently estimates prior to 1987 may exaggerate hatchery contributions somewhat. In 1987 returning adults from the Cannery Creek, Armin F. Koernig and Esther hatcheries were marked with half length coded wire tags (CWT). In a jointly funded program conducted by ADF&G and PWSAC, these marked fish were recovered and analyzed to estimate hatchery contributions to the fishery (Geiger,1990).

[b] Hatchery totals include cost recovery harvests, broodstock collection and escapement, and estimated common property fishery interception.

[c] Total wild stock return represents the estimated wild stock catch plus the aerial escapement index. 1999 wild stock component = 6,963,529 catch plus 2,462,862 escapement index.

[d] Revised contribution based on individual hatchery CWT adjustment factors (corrected in 2001).

[e] Hatchery totals from otoliths.



Appendix F.10. Estimated total pink salmon returns to hatcheries and wild stock systems, Prince William Sound, 1977 - 2000.

Appendix F.11. Historical catch contributions, coded wire tag (CWT) and thermally marked otolith releases, and total returns of pink salmon to all hatcheries combined, Prince William Sound, 1977 - 2000.

Brood Year	Return Year	Fry Release [a]	CWT/Otolith Applied to Fry Release [b]	Broodstock [a]	Total Cost Recovery Harvest [c]	Hatchery Contribution to CR Harvest [b]	Hatchery Contribution to Other Harvest [d]	Hatchery Contribution to the CPF [a]	Total Hatchery Return	Estimated Marine Survival	Revised Total Hatchery Return [e]	Revised Estimated Marine Survival [e]
1975	1977	1,000,000	0	16,112	15,545	7,745	0	4,000	27,857	2.79%		
1976	1978	11,010,577	0	40,432	114,188	114,188	0	0	154,620	1.40%		
1977	1979	16,950,784	0	54,207	223,748	223,748	0	275,000	552,955	3.26%		
1978	1980	25,600,739	0	145,061	346,728	346,728	0	1,092,048	1,583,837	6.19%		
1979	1981	24,194,000	0	268,501	707,037	707,037	0	1,430,747	2,406,285	9.95%		
1980	1982	91,076,000	0	239,945	1,354,732	1,354,732	0	4,303,900	5,898,577	6.48%		
1981	1983	91,951,000	0	258,062	686,963	686,963	0	3,338,366	4,283,391	4.66%		
1982	1984	115,107,533	0	341,259	415,393	415,393	0	3,313,423	4,070,075	3.54%		
1983	1985	116,336,000	0	640,340	1,209,960	1,209,960	0	6,259,923	8,110,223	6.97%		
1984	1986	191,306,265	0	466,471	905,464	905,464	0	5,662,315	7,034,250	3.68%		
1985	1987	231,538,713	646,561	1,158,908	2,691,190	2,691,190	0	14,197,065	18,047,163	7.79%		
1986	1988	218,830,647	568,688	824,302	1,632,701	1,632,701	0	8,748,000	11,205,003	5.12%		
1987	1989	532,045,966	939,498	856,927	7,853,419	5,767,911	0	10,561,099	17,185,937	3.23%	19,052,529	3.78%
1988	1990	507,688,297	1,074,099	749,910	8,732,658	6,691,160	0	24,379,475	31,820,545	6.27%	33,315,579	6.78%
1989	1991	615,139,948	1,128,899	1,324,255	6,119,141	5,201,860	3,573,805	20,900,355	31,000,275	5.04%	32,750,955	5.58%
1990	1992	603,519,636	1,091,403	789,880	3,049,394	2,626,248	30,290	4,345,805	7,792,223	1.29%	8,579,332	1.51%
1991	1993	495,700,200	823,128	921,073	2,639,982	1,544,727	14,648	2,392,162	4,872,610	0.98%	6,177,575	1.39%
1992	1994	567,320,470	950,976	1,422,306	10,308,169	7,613,582	56,396	21,173,273	30,265,557	5.33%	35,100,601	6.47%
1993	1995	488,575,978	941,811	1,154,635	5,057,418	4,703,457	78,020	9,072,469	15,008,581	3.07%	14,475,842	3.18%
1994	1996	613,158,229	1,017,782	544,531	8,285,166	5,363,551	0	14,502,198	20,410,280	3.33%	24,284,522	4.18%
1995	1997	651,675,427 [f]	1,079,354	841,448	9,776,254	8,907,382	0	13,953,798	23,702,628	3.64%	24,611,085	3.99%
1996	1998	484,525,934 [f]	484,525,934	1,247,617	8,825,226	8,391,247	0	15,950,501	25,589,365	5.28%		
1997	1999	542,356,070 [f]	542,356,934	1,444,953	13,131,211	13,224,977	0	24,817,348	39,480,974	6.56%		
1998	2000	602,128,903	602,128,903	1,084,540	11,125,819	11,077,360	0	21,950,759	34,112,659	5.67%		

[a] Data for BY 1985 and 1987 - 1995 provided by the ADF&G CWT project. PWSAC provided data for all other years. Starting in 1994, broodstock number includes fish processed for roe as reported by PWSAC.

[b] Data for brood years 1985 - 1995 years provided by the ADF&G CWT project, succeeding years data from thermally marked otoliths. Sales numbers include inter-hatchery contributions.

[c] Data for all years from ADF&G fish ticket information.

[d] Includes donated and/or discarded fish in 1991. Data provided by the ADF&G CWT project.

[e] Revised contribution based on individual hatchery CWT adjustment factors.

[f] All BY 1995 - 1997 fry released bore thermal otolith marks.

Appendix F.12. Hatchery contributions to the common property pink salmon seine fishery in the Eastern District, Prince William Sound, 2000.

Period	Catch Date	SGH	%	CCH	%	WNH	%	AFK	%	Wild	%	Total
01	06/30	188,596	98.9	0	0.0	0	0.0	0	0.0	2,006	1.1	190,602
02	07/04	1,445,252	96.9	0	0.0	0	0.0	0	0.0	46,621	3.1	1,491,873
03	07/06	930,557	97.9	0	0.0	0	0.0	0	0.0	20,229	2.1	950,786
04	07/09	1,561,990	97.9	0	0.0	0	0.0	0	0.0	33,234	2.1	1,595,224
05	07/11	1,259,656	96.9	0	0.0	0	0.0	0	0.0	40,634	3.1	1,300,290
06	07/13	1,210,572	97.9	0	0.0	0	0.0	0	0.0	26,317	2.1	1,236,889
07	07/15	529,680	94.1	6,621	1.2	0	0.0	0	0.0	26,484	4.7	562,785
08	07/17	25,557	29.2	0	0.0	0	0.0	0	0.0	62,067	70.8	87,624
09	07/21	123,657	49.5	0	0.0	0	0.0	0	0.0	126,289	50.5	249,946
10	07/26-07/27	143,073	43.0	17,884	5.4	0	0.0	0	0.0	171,688	51.6	332,645
11	07/28-07/29	52,043	83.9	0	0.0	0	0.0	0	0.0	10,008	16.1	62,051
12	07/30-07/31	31,255	84.0	0	0.0	0	0.0	0	0.0	5,953	16.0	37,208
13	08/01	10,340	3.2	3,447	1.1	0	0.0	0	0.0	313,656	95.8	327,443
14	08/05	0	0.0	3,243	1.0	6,486	2.1	0	0.0	301,608	96.9	311,337
15	08/07	1,546	1.0	9,273	6.2	1,546	1.0	0	0.0	136,005	91.7	148,370
16	08/09	0	0.0	7,515	2.5	7,515	2.5	0	0.0	289,326	95.1	304,356
17	08/12	0	0.0	2,580	1.1	2,580	1.1	0	0.0	239,898	97.9	245,058
18	08/15	0	0.0	6,450	2.0	6,450	2.0	3,225	1.0	306,390	95.0	322,515
19	08/17	0	0.0	0	0.0	3,245	5.4	1,623	2.7	55,171	91.9	60,039
20	08/25	0	0.0	0	0.0	0	0.0	0	0.0	1,219	100.0	1,219
21	08/27	0	0.0	0	0.0	0	0.0	0	0.0	1,202	100.0	1,202
22	08/29	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
23	08/31	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
24	09/06-09/07	0	0.0	0	0.0	0	0.0	0	0.0	4	100.0	4
25	09/08-09/09	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Total		7,513,774	76.5	57,013	0.6	27,822	0.3	4,848	0.0	2,216,009	22.6	9,819,466

Appendix F.13. Hatchery contributions to the common property pink salmon seine fishery in the Northern District, Prince William Sound, 2000.

Period	Catch Date	SGH	%	CCH	%	WNH	%	AFK	%	Wild	%	Total
01	07/26	0	0.0	9,121	27.3	0	0.0	0	0.0	24,321	72.7	33,442
02	08/01	0	0.0	112,585	64.2	1,846	1.1	0	0.0	60,906	34.7	175,337
03	08/05	0	0.0	302,560	82.3	19,149	5.2	0	0.0	45,959	12.5	367,668
04	08/07	0	0.0	133,841	85.9	0	0.0	0	0.0	22,001	14.1	155,842
05	08/09	0	0.0	215,348	81.2	27,609	10.4	0	0.0	22,087	8.3	265,044
06	08/12	0	0.0	221,622	62.5	64,472	18.2	8,059	2.3	60,442	17.0	354,595
07	08/17	0	0.0	440,142	79.3	84,411	15.2	6,029	1.1	24,117	4.3	554,699
08	08/19	0	0.0	463,118	58.9	297,718	37.9	0	0.0	24,810	3.2	785,646
09	08/21	0	0.0	379,688	83.3	28,477	6.3	0	0.0	47,461	10.4	455,626
10	08/23	0	0.0	149,678	45.8	105,329	32.2	5,544	1.7	66,523	20.3	327,074
11	08/25	0	0.0	94,063	72.9	18,813	14.6	0	0.0	16,124	12.5	129,000
12	08/27-08/28	0	0.0	123,503	93.2	3,632	2.7	0	0.0	5,449	4.1	132,584
13	08/29-08/30	0	0.0	32,065	93.0	1,034	3.0	0	0.0	1,380	4.0	34,479
14	08/31-09/01	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
15	09/02-09/05	0	0.0	14,150	93.2	416	2.7	0	0.0	624	4.1	15,190
16	09/06-09/09	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
17	09/10-09/13	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
18	09/14-09/17	0	0.0	206,590	100.0	0	0.0	0	0.0	0	0.0	206,590
19	09/18-09/24	0	0.0	80,319	100.0	0	0.0	0	0.0	0	0.0	80,319
Total		0	0.0	2,978,393	73.1	652,906	16.0	19,632	0.5	422,204	10.4	4,073,135

Appendix F.14. Hatchery contributions to the common property pink salmon drift gillnet and seine fisheries in the Coghill District, Prince William Sound, 2000.

Period	Catch Date	SGH	%	CCH	%	WNH	%	AFK	%	Wild	%	Total
01	06/01-06/12	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
02	06/05-06/06	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
03	06/09-06/10	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
04	06/12-06/13	0	0.0	0	0.0	0	0.0	0	0.0	289	100.0	289
05	06/15-06/16	0	0.0	0	0.0	0	0.0	0	0.0	2	100.0	2
06	06/19-06/20	0	0.0	0	0.0	0	0.0	0	0.0	9	100.0	9
07	06/23-06/24	0	0.0	0	0.0	0	0.0	0	0.0	33	100.0	33
08	06/26-06/27	33	8.9	0	0.0	0	0.0	0	0.0	336	91.1	369
09	06/29-06/30	138	9.1	0	0.0	0	0.0	0	0.0	1,382	90.9	1,520
10	07/03-07/04	566	9.0	0	0.0	0	0.0	0	0.0	5,725	91.0	6,291
11	07/06-07/08	793	9.0	0	0.0	0	0.0	0	0.0	8,023	91.0	8,816
12	07/10-07/12	1,271	9.0	0	0.0	0	0.0	0	0.0	12,851	91.0	14,122
13	07/13-07/15	1,075	9.0	0	0.0	0	0.0	0	0.0	10,865	91.0	11,940
14	07/17-07/19	968	9.0	0	0.0	0	0.0	0	0.0	9,788	91.0	10,756
15	07/20-07/21	465	9.0	0	0.0	0	0.0	0	0.0	4,706	91.0	5,171
16	08/19	0	0.0	13,012	2.5	435,885	82.7	6,506	1.2	71,563	13.6	526,966
17	08/21	0	0.0	32,979	6.3	423,229	81.1	0	0.0	65,958	12.6	522,166
18	08/23-08/24	0	0.0	53,444	5.2	897,862	87.5	0	0.0	74,822	7.3	1,026,128
19	08/25-08/26	0	0.0	145,280	30.2	295,569	61.5	15,029	3.1	25,048	5.2	480,926
20	08/27-08/28	0	0.0	59,251	22.8	183,396	70.7	5,643	2.2	11,286	4.3	259,576
21	08/29-08/30	0	0.0	40,633	22.8	125,770	70.7	3,870	2.2	7,740	4.3	178,013
22	08/31-09/01	0	0.0	39,756	22.8	123,054	70.7	3,786	2.2	7,573	4.3	174,169
23	09/02-09/05	0	0.0	26,949	22.8	83,413	70.7	2,567	2.2	5,132	4.3	118,061
24	09/06-09/09	0	0.0	3,106	23.0	9,588	71.0	270	2.0	540	4.0	13,504
25	09/11-09/12	0	0.0	115	23.1	354	71.2	10	2.0	18	3.6	497
26	09/13	0	0.0	50	22.9	154	70.6	5	2.3	9	4.1	218
Total		5,309	0.2	414,575	12.3	2,578,274	76.7	37,686	1.1	323,698	9.6	3,359,542

Appendix F.15. Hatchery contributions to the common property pink salmon drift and set gillnet fisheries in the Eshamy District, Prince William Sound, 2000.

Period	Catch Date	SGH	%	CCH	%	WNH	%	AFK	%	Wild	%	Total
10	07/17-07/18	0	0.0	860	10.5	1,291	15.8	0	0.0	6,024	73.7	8,175
11	07/20-07/21	0	0.0	1,766	10.5	2,649	15.8	0	0.0	12,365	73.7	16,780
12	07/24-07/25	0	0.0	1,653	10.5	2,479	15.8	0	0.0	11,571	73.7	15,703
13	07/26-07/28	0	0.0	2,457	10.5	3,686	15.8	0	0.0	17,205	73.7	23,348
14	07/29-07/30	0	0.0	143	10.5	214	15.8	0	0.0	1,000	73.7	1,357
15	07/31	0	0.0	2,947	10.5	4,421	15.8	0	0.0	20,635	73.7	28,003
16	08/01	0	0.0	1,328	10.5	1,992	15.8	0	0.0	9,298	73.7	12,618
17	08/02-08/03	0	0.0	846	10.5	1,269	15.8	0	0.0	5,925	73.7	8,040
18	08/04	0	0.0	4,979	17.6	12,446	44.1	0	0.0	10,787	38.2	28,212
19	08/05-08/06	0	0.0	184	5.1	829	23.1	230	6.4	2,348	65.4	3,591
20	08/07-08/08	0	0.0	3,033	5.1	13,650	23.1	3,792	6.4	38,676	65.4	59,151
21	08/09	0	0.0	56	5.1	254	23.1	70	6.4	719	65.4	1,099
22	08/10-08/11	0	0.0	3,608	5.1	16,239	23.1	4,511	6.4	46,012	65.4	70,370
23	08/12	0	0.0	249	5.1	1,120	23.1	311	6.4	3,174	65.4	4,854
24	08/13	0	0.0	1,579	5.1	7,105	23.1	1,974	6.4	20,133	65.4	30,791
25	08/14	0	0.0	1,087	5.1	4,892	23.1	1,359	6.4	13,861	65.4	21,199
26	08/17-08/18	0	0.0	3,436	5.1	15,462	23.1	4,295	6.4	43,812	65.4	67,005
27	08/21-08/22	0	0.0	2,186	5.1	9,840	23.1	2,734	6.4	27,880	65.4	42,640
28	08/25-08/26	0	0.0	2,040	5.1	9,179	23.1	2,550	6.4	26,005	65.4	39,774
29	08/28-08/29	0	0.0	989	5.1	4,449	23.1	1,236	6.4	12,603	65.4	19,277
30	08/31-09/01	0	0.0	616	5.1	2,774	23.1	771	6.4	7,860	65.4	12,021
31	09/04-09/05	0	0.0	13	5.2	58	23.2	16	6.4	163	65.2	250
Total		0	0.0	36,055	7.0	116,298	22.6	23,849	4.6	338,056	65.7	514,258

Appendix F.16. Hatchery contributions to the common property pink salmon seine fishery in the Southwestern District, Prince William Sound, 2000.

Period	Catch Date	SGH	%	CCH	%	WNH	%	AFK	%	Wild	%	Total
04	06/19-06/25	0	0.0	0	0.0	0	0.0	0	0.0	42	100.0	42
05	06/26-07/02	0	0.0	0	0.0	0	0.0	0	0.0	18	100.0	18
06	07/03-07/09	0	0.0	0	0.0	0	0.0	0	0.0	80	100.0	80
07	07/10-07/16	0	0.0	0	0.0	0	0.0	0	0.0	193	100.0	193
08	07/17-07/23	294	14.6	123	6.1	196	9.8	98	4.9	1,299	64.6	2,010
09	07/24-07/25	1,189	14.6	495	6.1	792	9.8	396	4.9	5,251	64.6	8,123
10	07/26-07/27	11,929	14.6	4,971	6.1	7,953	9.8	3,976	4.9	52,689	64.6	81,518
11	07/28-07/29	1,912	14.6	797	6.1	1,274	9.8	637	4.9	8,443	64.6	13,063
12	08/01	1,205	0.8	18,077	12.5	33,744	23.3	16,872	11.7	74,721	51.7	144,619
13	08/05	2,425	0.5	60,634	13.2	130,969	28.6	82,462	18.0	181,900	39.7	458,390
14	08/07	7,279	1.1	90,992	13.3	174,705	25.5	160,146	23.4	251,139	36.7	684,261
15	08/09	0	0.0	96,435	15.4	149,641	23.9	186,220	29.8	192,872	30.9	625,168
16	08/12	0	0.0	71,678	16.5	90,175	20.7	161,853	37.2	110,985	25.5	434,691
17	08/17	0	0.0	133,188	21.8	128,595	21.1	220,449	36.1	128,595	21.1	610,827
18	08/19	0	0.0	61,921	5.8	101,324	9.5	765,563	71.6	140,728	13.2	1,069,536
19	08/21	0	0.0	96,132	11.6	113,610	13.7	485,029	58.4	135,459	16.3	830,230
20	08/23	0	0.0	184,895	18.4	157,705	15.7	478,553	47.6	184,895	18.4	1,006,048
21	08/25-08/26	0	0.0	135,033	14.0	170,042	17.6	550,135	57.0	110,027	11.4	965,237
22	08/27-08/28	0	0.0	84,928	9.9	129,627	15.1	536,389	62.5	107,278	12.5	858,222
23	08/29-08/30	0	0.0	82,318	12.4	153,660	23.1	378,661	57.0	49,390	7.4	664,029
24	08/31-09/01	0	0.0	38,509	12.4	71,884	23.1	177,142	57.0	23,106	7.4	310,641
25	09/02-09/05	0	0.0	43,976	12.4	82,089	23.1	202,290	57.0	26,385	7.4	354,740
26	09/06-09/09	0	0.0	3,115	12.4	5,815	23.1	14,329	57.0	1,868	7.4	25,127
27	09/10-09/13	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
28	09/14-09/16	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
29	09/17-09/24	0	0.0	0	0.0	0	0.0	161,586	100.0	0	0.0	161,586
Total		26,233	0.3	1,208,217	13.0	1,703,800	18.3	4,582,786	49.2	1,787,363	19.2	9,308,399

Appendix F.17. Hatchery contributions to the common property pink salmon seine fishery in the Montague District, Prince William Sound, 2000.

Period	Catch Date	SGH	%	CCH	%	WNH	%	AFK	%	Wild	%	Total
01	06/01-06/04	79	100.0	0	0.0	0	0.0	0	0.0	0	0.0	79
02	06/05-06/11	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
03	06/12-06/18	3	100.0	0	0.0	0	0.0	0	0.0	0	0.0	3
04	06/19-06/25	61	100.0	0	0.0	0	0.0	0	0.0	0	0.0	61
05	06/26-07/02	82,589	100.0	0	0.0	0	0.0	0	0.0	0	0.0	82,589
06	07/03-07/09	3,265	100.0	0	0.0	0	0.0	0	0.0	0	0.0	3,265
07	07/10-07/16	574	100.0	0	0.0	0	0.0	0	0.0	0	0.0	574
08	07/21	0	0.0	0	0.0	0	0.0	0	0.0	1,063	100.0	1,063
Total		86,571	98.8	0	0.0	0	0.0	0	0.0	1,063	1.2	87,634

Appendix F.18. Hatchery contributions to the common property pink salmon seine fishery in the Southeastern District, Prince William Sound, 2000.

Period	Catch Date	SGH	%	CCH	%	WNH	%	AFK	%	Wild	%	Total
1	07/15	2,972	66.7	0	0.0	0	0.0	0	0.0	1,486	33.3	4,458
2	07/17	359	66.6	0	0.0	0	0.0	0	0.0	180	33.4	539
3	07/21	0	0.0	149	1.3	0	0.0	0	0.0	11,497	98.7	11,646
4	07/26	0	0.0	584	1.3	0	0.0	0	0.0	44,949	98.7	45,533
5	08/01	0	0.0	0	0.0	0	0.0	0	0.0	60,390	100.0	60,390
6	08/05	0	0.0	0	0.0	0	0.0	0	0.0	82,989	100.0	82,989
7	08/07	0	0.0	0	0.0	0	0.0	0	0.0	94,743	100.0	94,743
8	08/09	0	0.0	0	0.0	0	0.0	0	0.0	81,876	100.0	81,876
9	08/12	0	0.0	0	0.0	0	0.0	0	0.0	93,243	100.0	93,243
10	08/15	0	0.0	0	0.0	0	0.0	1,517	2.3	63,726	97.7	65,243
11	08/17	0	0.0	0	0.0	0	0.0	0	0.0	9,103	100.0	9,103
Total		3,331	0.6	733	0.1	0	0.0	1,517	0.3	544,182	99.0	549,763

Appendix F.19. Hatchery contributions to the common property pink salmon drift gillnet and seine fisheries in the Unakwik District, Prince William Sound, 2000.

Period	Catch Date	SGH	%	CCH	%	WNH	%	AFK	%	Wild	%	Total
11	08/19	0	0.0	18,121	88.5	788	3.8	0	0.0	1,576	7.7	20,485
Total		0	0.0	18,121	88.5	788	3.8	0	0.0	1,576	7.7	20,485

APPENDIX G: SUBSISTENCE AND PERSONAL USE FISHERIES

Appendix G.1. Subsistence salmon harvest by species and gear type, Prince William Sound and Upper Copper River, 2000.

Area	Permits Issued	Permits Fished	Gear Type	Chinook	Sockeye	Coho	Pink	Chum	Other[a,b]	Total
Prince William Sound	3	0	Drift Gillnet	0	0	0	0	0	0	0
	0	0	Purse Seine	0	0	0	0	0	0	0
	0	0	Set Gillnet	0	0	0	0	0	0	0
Copper River Flats	416	293	Drift Gillnet	689	4,360	44	3	17	5	5,118
Upper Copper River	336	292	Dip Net	351	8,937	86	0	0	37	9,411
Glennallen Subdistrict	765	721	Fish Wheel	2,707	63,964	206	0	0	290	67,167
Chitina Subdistrict	8,151	7,687	Dip Net	3,037	103,329	3,540	0	0	189	110,095
Eastern	12	3	Drift Gillnet and Dip Net	0	140	468	40	40	0	688
Southwestern	12	6	Drift Gillnet and Dip Net	24	39	229	211	143	0	646
Batzulnetas	1	1	Fish Wheel	0	55	0	0	0	0	55
Total	9,696	9,003		6,808	180,824	4,573	254	200	521	193,180

[a]Includes flounder and Dolly Varden as well as misc. salmon species.

[b] Unidentified salmon only in the Chitina Subdistrict

Appendix G.2. Salmon catch and effort in the Prince William Sound subsistence fishery, 1965 - 2000.

	Permits		Catch[a]						
Year	Issued	Returned	Chinook	Sockeye	Coho	Pink	Chum	Unknown	Total
1965	22	16				179	25		204
1966	3	3		3	19	20	50		92
1967	4	3			4	4			8
1968	4	3			20	156		22	198
1969	7	3			16				16
1970	1	1							0
1971	3	2				46			46
1972	0								0
1973	19	16			289				289
1974	3	1							0
1975	2	0							0
1976	0								0
1977	4	4							0
1978	3	2							0
1979	15	2							0
1980	26	15		7	6				13
1981	12	8		3	29		2		34
1982	35	27		84	4	31	24		143
1983	26	21		22	36	9	79		146
1984	8	8		10		11	2		23
1985	22	16	1	27	16	14	26		84
1986	25	14		5	15				20
1987	18	17	5	31	6		16		58
1988	7	7	2	51	7	10	9		79
1989	11	7	0	0	0	0	3	0	3
1990	8	7	0	0	7	4	0	0	11
1991	9	5	0	2	0	0	0	0	2
1992	10	6	0	20	0	0	0	0	20
1993	6	6	1	104	10	0	0	0	115
1994	5	4	0	0	0	0	0	0	0
1995	4	2	0	0	0	0	0	0	0
1996	10	7	0	0	0	0	0	0	0
1997	4	3	0	3	0	0	0	0	3
1998	4	3	0	0	0	0	0	0	0
1999	3	3	0	0	0	0	0	0	0
2000	3	3	0	0	0	0	0	0	0

[a] Includes catches from Prince William Sound, exclusive of the Copper River Flats.

Appendix G.3. Salmon catch and effort in the Copper River District subsistence gillnet fishery, 1965-2000.

	Total	Permits Issued			Catch				
Year	Issued	Fished[a]	Not Fished	Not returned	Chinook	Sockeye	Coho	Total	
1965	31	15	5	11	12	459	85	556	
1966	45	21	10	14	47	175		222	
1967	61	37	19	5	83	153		236	
1968	17	7	8	2	11	36		47	
1969	49	20	13	16	16	63	85	164	
1970	32	24	3	5	66	179		245	
1971	29	17	9	3	10	32	4	46	
1972	104	75	5	24	149	569	53	771	
1973	94	89	N/A	5	153	326	180	659	
1974	9	3	2	4	5	4	2	11	
1975	2	2	N/A	0	0	5	0	5	
1976	27	14	N/A	13	1	10	0	11	
1977	23	22	N/A	1	10	71	0	81	
1978	34	9	19	6	37	18	12	67	
1979	49	21	20	8	45	26	17	88	
1980	39	18	17	4	19	27	17	63	
1981	72	30	21	21	48	145	104	297	
1982	108	48	42	18	60	634	106	802	[b]
1983	87	31	42	14	79	107	57	254	[b]
1984	118	57	47	14	68	324	135	549	[b]
1985	94	67	27	0	88	261	83	433	[b]
1986	88	57	28	3	86	348	47	481	[b]
1987	95	39	50	6	49	359	14	510	[b]
1988	114	57	40	17	59	226	42	440	[b]
1989	75	32	32	11	56	339	51	454	[b]
1990	88	40	39	12	60	469	82	680	[c,d]
1991	129	71	44	14	136	830	38	1,009	[c,d]
1992	126	67	47	12	142	785	42	999	[c,d]
1993	111	50	43	18	120	428	29	579	[c,d]
1994	101	60	37	4	164	474	67	708	[d]
1995	126	72	41	13	154	692	31	880	[c,d]
1996	176	101	57	18	276	969	47	1,294	[c,d]
1997	269	165	78	26	200	1,001	1,777	2,989	[c,d]
1998	245	144	87	14	295	850	680	1,832	[c,d]
1999	294	175	100	19	353	1,330	682	2,379	[c,d]
2000	416	293	107	16	689	4,360	44	5,118	[b]

[a]Includes all permit holders, successful or unsuccessful.

[b]Total also includes pink,chum and dolly varden.

[c]Data updated in 2000.

[d]Total includes whitefish, dolly varden, and/or other misc. species.

Appendix G.4. Salmon catch and effort in the Eastern District (Tatitlek) and Southwestern District (Chenega) subsistence fisheries, Prince William Sound, 1988 - 2000.

	Permits		Catch						
Year	Issued	Fished	Chinook	Sockeye	Coho	Pink	Chum	Unknown	Total
				EASTERN					
1988	17	9	2	210	249	143	297	0	901
1989	14	7	1	107	653	28	43	0	832
1990	13	8	0	5	241	10	4	0	260
1991	19	7	0	107	984	320	28	0	1,439
1992	15	5	2	441	369	30	49	0	891
1993	18	7	2	512	305	144	74	180	1,217
1994	14	4	0	50	143	50	70	0	313
1995 [a]	15								
1996	6	1	0	0	38	0	0	0	38
1997	6	3	0	107	45	0	54	0	206
1998	11	2	0	2	71	4	28	0	105
1999	17	8		344	541	31	31	0	947
2000	12	3		140	468	40	40	0	688
				SOUTHWESTERN					
1988	10	5	1	50	8	251	294	0	604
1989	8	7	0	322	0	554	180	0	1,056
1990	7	2	1	36	5	20	2	0	64
1991	12	4	3	345	42	195	53	0	638
1992	14	8	1	526	23	313	99	0	962
1993	22	17	2	835	50	232	124	0	1,243
1994	16	8	5	192	77	402	161	0	837
1995	10	5	2	152	67	67	41	0	329
1996	7	3	0	107	7	105	46	0	265
1997	5	4	44	193	30	110	272	0	649
1998	4	3	13	114	20	65	119	0	331
1999	14	7	57	499	62	168	101	0	887
2000	12	6	24	39	229	211	143	0	646

[a] No permits were returned.

Appendix G.5. Salmon catch by species and numbers of permits by gear type for the Upper Copper River subsistence and personal use fisheries, 1981 - 2000.

	Permits Issued			Reported Catch [a]			Reported Catch by Species			Total Salmon Catch	
		Fish			% Fish						
Year	Dip Net	Wheel	Total	% Dip Net	Wheel	Total	Chinook	Sockeye	Coho	Reported	Estimated
1981	3,555	523	4,078	52%	48%	55,796	1,913	53,008	849	55,770	68,654
1982	5,475	615	6,090	62%	38%	100,734	2,532	96,799	1,246	100,577	109,557
1983	6,911	630	7,541	67%	33%	108,228	5,421	100,995	1,690	108,106	118,599
1984 s	104	458	562	6%	94%	20,597	366	20,101	120	20,587	28,617
p	5,311	17	5,328	100%		46,241	1,592	44,079	552	46,223	50,714
s&p	5,415	475	5,890	70%	30%	67,903	2,007	65,078	789	67,874	79,331
1985	4,153	533	5,686	57%	43%	52,733	1,673	50,488	544	52,705	64,164
1986 s[b]	39	366	405	3%	97%	25,781	622	24,890	264	25,776	28,417
p	3,966	65	4,031	98%	2%	42,695	2,294	39,794	521	42,609	44,047
s&p	4,005	431	4,436	62%	38%	68,476	2,916	64,684	785	68,385	72,464
1987 s[b]	59	372	431	4%	96%	25,271	531	21,615	105	22,251	34,080
p	4,186	73	4,259	99%	1%	43,409	2,749	40,285	393	43,427	46,908
s&p	4,245	445	4,690	64%	36%	68,680	3,280	61,900	498	65,678	80,988
1988 s	70	339	409	9%	91%	21,481	693	20,391	260	21,344	30,558
p	4,205	46	4,251	97%	3%	41,730	2,723	38,533	450	41,706	45,855
s&p	4,275	385	4,660	68%	32%	62,545	3,416	58,924	710	63,050	76,413
1989 s	78	308	386	8%	92%	27,732	745	26,835	65	27,645	29,216
p	4,447	137	4,584	94%	6%	56,544	2,160	53,505	825	56,490	58,941
s&p	4,525	445	4,970	66%	34%	84,156	2,905	80,340	890	84,135	88,157
1990 s	95	311	406	9%	91%	30,663	610	29,947	87	30,644	32,504
p	5,631	58	5,689	99%	1%	67,988	2,594	63,793	1,446	67,833	70,812
s&p	5,726	369	6,095	71%	29%	98,633	3,204	93,740	1,533	98,477	103,316
1991 s	293	418	711	16%	84%	37,761	1,217	36,289	213	37,719	41,159
p	6,222	NA	6,222	100%		82,767	3,947	75,499	3,264	82,710	85,059
s&p	6,515	418	6,933	74%	26%	120,528	5,164	111,788	3,477	120,429	126,218
1992 s	151	504	655	10%	90%	44,448	1,368	42,689	330	44,387	47,031
p	6,387	NA	6,387	100%		89,840	3,337	84,981	1,487	89,805	91,683
s&p	6,538	504	7,042	70%	30%	134,288	4,705	127,670	1,817	134,192	138,714
1993 s	14	759	773	1%	99%	50,044	1,308	48,582	70	49,960	54,762
p	7,914	NA	7,914	100%		93,747	2,729	89,629	1,358	93,716	97,767
s&p	7,928	759	8,687	65%	35%	143,791	4,037	138,211	1,428	143,676	152,529
1994 s	267	703	970	10%	90%	64,658	1,827	62,717	55	64,599	70,326
p	7,061	NA	7,061	100%		95,903	3,596	90,332	1,903	95,831	99,822
s&p	7,328	703	8,031	64%	36%	160,561	5,423	153,049	1,958	160,430	170,148
1995 s	191	665	856	7%	93%	51,517	1,762	48,903	821	51,486	55,290
p	6,760	NA	6,760	100%		85,997	4,568	76,670	4,726	85,964	88,617
s&p	6,951	667	7,616	65%	35%	137,104	6,330	125,573	5,547	137,450	143,907
1996 s	219	631	850	11%	89%	50,843	1,388	48,747	522	50,657	54,092
p	7,198	NA	7,198	100%		99,511	3,493	92,590	3,295	99,378	101,972
s&p	7,417	631	8,048	70%	30%	150,354	4,881	141,337	3,817	150,035	156,064
1997 s	286	847	1,133	10%	90%	80,961	2,439	78,188	177	80,804	85,578
p	9,086	NA	9,086	100%		151,387	5,336	145,881	155	151,372	154,467
s&p	9,372	847	10,219	69%	31%	231,517	7,775	224,069	332	232,176	240,045
1998 s	272	738	1,010	13%	87%	63,633	1,751	61,268	507	63,526	66,838
p	10,006	NA	10,006	100%		143,027	6,583	134,299	2,100	142,982	143,027
s&p	10,278	738	11,016	73%	27%	206,769	8,334	195,567	2,607	206,508	209,865
1999 s	336	766	1,104	12%	88%	76,633	3,058	72,901	292	76,251	80,947
p	9,943	NA	9,943	100%		145,612	5,755	137,729	2,095	145,579	149,877
s&p	10,279	766	11,047	70%	30%	222,245	8,813	210,630	2,387	221,830	230,824
2000[c] g	464	787	1,251	14%	86%	63,739	4,782	58,241	511	63,534	64,885
c	8,151	NA	8,151	100%		110,095	3,037	103,329	3,540	109,906	114,681
g&c	8,615	787	9,402	69%	31%	173,834	7,819	161,570	4,051	109,906	179,566

prior seasons
s = subsistence
p = personal use
s&p = total catch

2000 season
g = Glennallen Subdistrict
c = Chitina Subdistrict
g&c = total catch

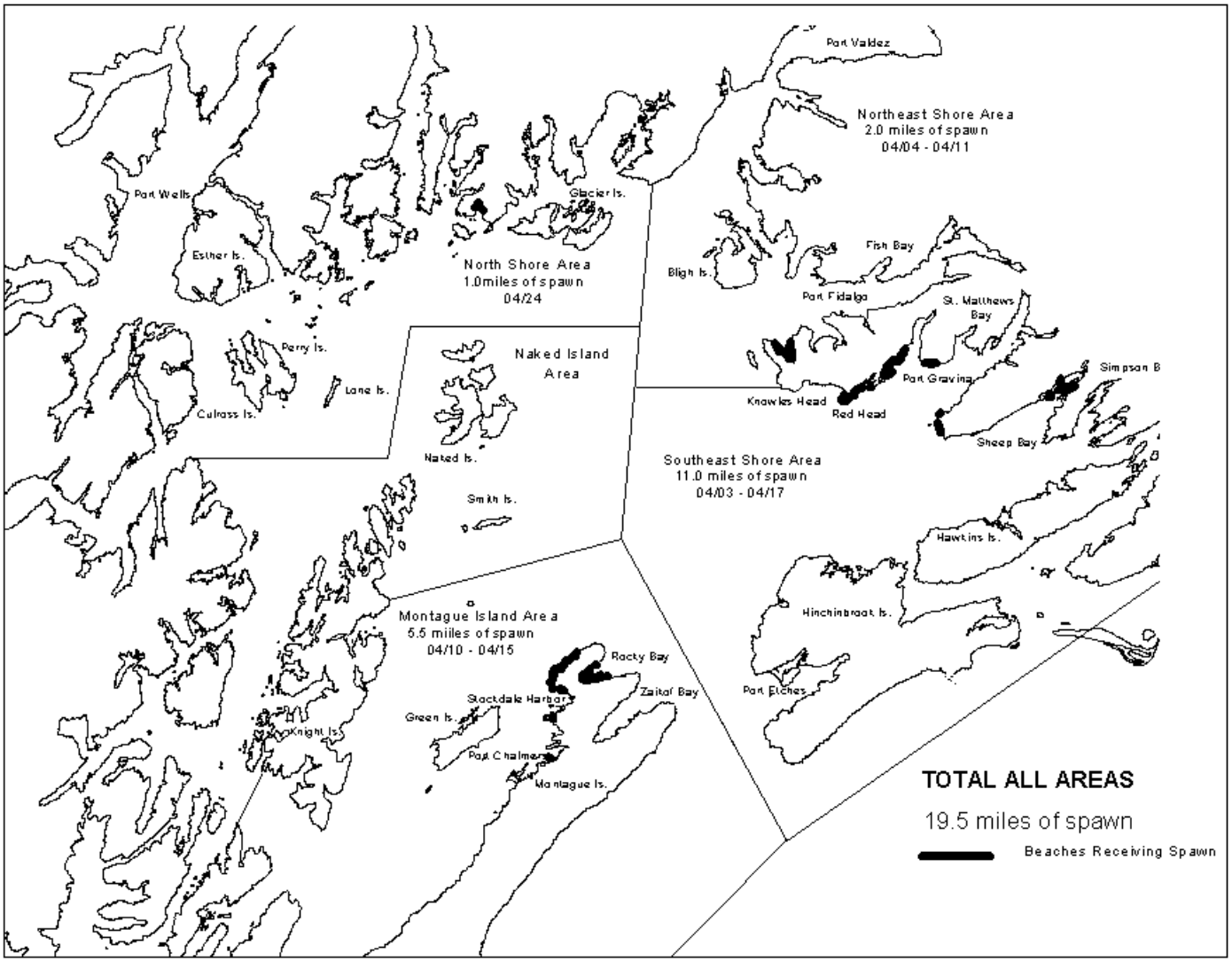
[a] Includes all reported species
[b] Subsistence dip net catch estimated
[c] Personal use changed to subsistence in 2000

Appendix G.6. Personal use salmon harvest by district, species and gear type, Prince William Sound Management Area, 2000.

District	Permits	Landings	Gear Type	Chinook [a]	Sockeye	Coho	Pink	Chum
Copper River	246	452	Drift Gillnet	740	651	0	0	3
Coghill	7	9	Drift Gillnet	1	45	1	0	6
Southwestern	1	1	Purse Seine	1	4	0	0	0
Eshamy	2	2	Drift Gillnet	0	2	1	0	0
Total	256	464		742	702	2	0	9

[a] In 1994 the BOF passed regulation 5 AAC 24.356 requiring all chinook salmon taken in the Copper River and Bering River Districts, but not sold, be reported on fish tickets.

APPENDIX H: HERRING FISHERIES



Appendix H.1. Location of spawning herring and miles of spawn observed during aerial surveys in Prince William Sound, 2000.

Appendix H.2. Prince William Sound commercial Pacific herring harvest summary with fishing location and effort by gear type, 2000.

Fishery	Fishing Information				Harvest and Use (tons)	
	Area	Date	Duration	Effort	Spawn-on-kelp	Pacific Herring
Sac Roe Purse Seine	NO OPENINGS					
	Total					0.0
Sac Roe Gillnet	NO OPENINGS					
	Total					0.0
Wild spawn-on-kelp	NO OPENINGS					
	Total[a]					0.0[b]
Pound spawn-on-kelp	NO OPENINGS					
	Total[c]					0.0[d]
Food/Bait Fishery	NO OPENINGS					
	Total					0.0
Harvest and Use - Total						0.0

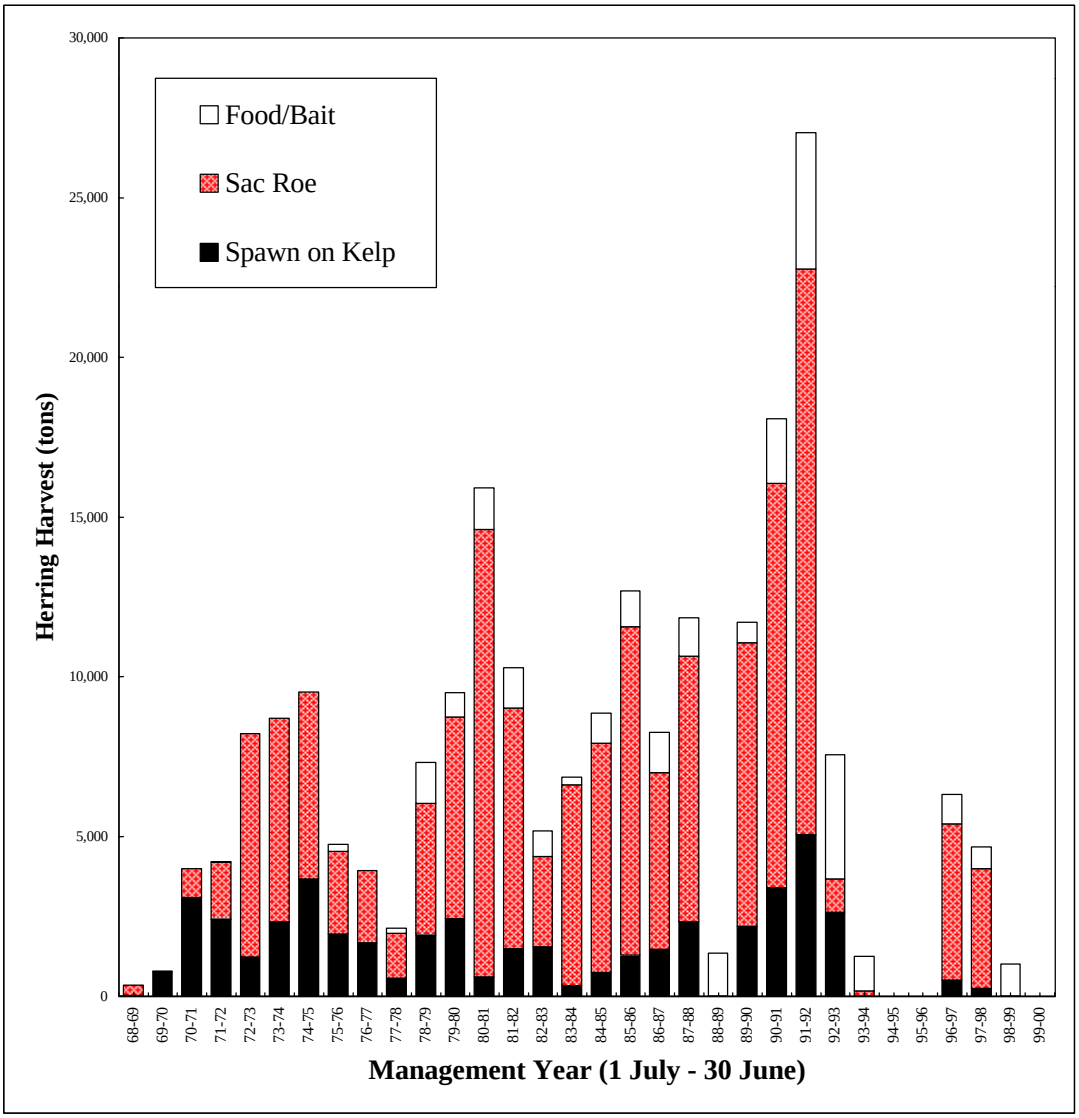
[a] The harvest of naturally occurring herring spawn on native kelp in Prince William Sound.

[b] The biomass of herring subjected to removal of reproductive capacity of the population based on the assumptions tha 10% of the biomass of pre-spawning herring consists of eggs and that 80% of the weight of harvested spawn on kelp consists of eggs.

[c] The harvest of herring spawn on kelp produced in net pens or pounds.

[d] The biomass of herring subjected to stress mortality and removal of reproductive capacity of the population based on assumption that 12.5 tons of herring are needed to produce one ton of spawn on kelp.

All Fisheries Herring Harvest
Prince William Sound



Appendix H.3. Prince William Sound commercial herring harvest by management year and fishery, 1968-2000.

Appendix H.4. Pacific herring sac roe seine and gillnet fishery effort, anticipated harvest, and actual harvest, Prince William Sound, 1969-2000.

	Seine Fishery							Gillnet Fishery							Total
Calendar Year	Opening Dates	Hours	Effort (Boats)	Guideline Harvest [a]	Harvest (tons)	CPUE (tons/Boat Hr)	Estimated Roe %	Opening Dates	Hours	Effort (Boats)	Guideline Harvest [a]	Harvest (tons)	CPUE (tons/Boat Hr)	Estimated Roe %	Harvest (tons)
1969	3/01 - 6/30		5		325.4										325.4
1970	3/01 - 6/30														
1971	3/01 - 6/30		12		919.2										919.2
1972	3/01 - 6/30		18		1,777.2										1,777.2
1973	4/23 - 5/09		31		6,991.9										6,991.9
1974	4/10 - 4/17		72		6,371.0			4/10 - 4/17		3		3.8			6,374.8
1975	4/15 - 4/22	14.0	76		5,853.8	5.50			14.0						5,853.8
1976	5/08 & 6/01	13.0	66		2,584.2	3.01			13.0						2,584.2
1977	4/09 - 4/10	38.0	58		2,265.6	1.03		4/09 - 04/10	38.0	1		1.6	0.04		2,267.1
1978	4/17 - 4/21 [b]	106.0	75	5,000	1,329.5	0.17		4/17 - 04/21	106.0	38		61.7	0.02		1,391.2
1979	4/07 - 4/19	215.5	89	5,000	4,138.0	0.22		CLOSED [c]							4,138.0
1980	4/01 - 4/09	162.0	76	5,000	6,042.2	0.49		4/17 - 5/05		16		264.4			6,306.7
1981	4/01 - 4/09	60.0	106	5,000	13,768.2	2.16		4/16 - 4/18	53.0	18		234.5	0.25		14,002.8
1982	4/23	2.0	95	5,000	7,148.3	37.62	10-14%	4/24 - 4/26	54.0	18		393.9	0.41	12-15%	7,542.2
1983	4/13	1.0	103 [d]	5,000	2,728.5	26.49	11.0%	4/21 - 4/22	24.0	22		105.4	0.20	11.0%	2,833.9
1984	4/14	3.0	105 [e]	5,000	5,946.1	18.88	10-11%	4/18 - 4/22	59.0	23	250	342.7	0.25	8-14%	6,288.8
1985	4/28 - 4/29	4.0	103 [f]	5,000	6,764.1	16.42	10-12%	4/29 - 5/01	34.0	21	250	413.3	0.58	10-12%	7,177.4
1986	4/17	3.0	106	5-7,000	9,828.1	30.91	11.0%	4/24 - 4/28	90.0	24	3-400	448.6	0.21	11.4%	10,276.7
1987	4/08 - 4/09	1.5	96	3-5,000	4,982.2	34.60	10.0%	4/10 - 4/11	24.0	24	2-300	533.3	0.93	9.5%	5,515.5
1988	4/21 - 4/22	2.0	105	4-5,000	7,977.3	37.99	10.5%	4/23	5.5	24	275	353.0	2.67	10.0%	8,330.3
1989	Season Closed [g]			6,400							375				0.0
1990	4/12	0.3	96	6,038	8,362.1	290.35	10.0%	4/13	4.0	24	353	505.4	5.26	10.6%	8,867.5
1991	4/09, 4/10, & 4/19	1.3	104	11,233	11,923.0 [h]	85.32	10.5%	4/18	10.5	24	657	742.0	2.94	11.06%	12,665.1
1992	4/13, 4/17, & 4/21	2.0	104	14,100	16,784.2 [i]	80.69	10.0%	4/23 - 4/24	11.0	24	825	940.6	3.56	10.8%	17,724.8
1993	No Harvest			15,586				4/15, 4/17-4/19	36.0	24	912	1,029.9	1.19	11.01%	1,029.9
1994	Season Closed j			0	151.0 [k]						0				151.0
1995	Season Closed j			0							0				0.0
1996	Season Closed j			0							0				0.0
1997	4/13,4/15	1.8	71	2,965	4,703.5	36.80	9.75%	4/09	2.5	22	175	175.7	3.19	8.00%	4,879.2
1998	4/06	0.5	46	3,367	3,329.7	144.77	9.6%	4/11, 4/12	6.5	20	197	415.1	3.19	11.0%	3,744.8
1999	Season Closed j			3,447							202				0.0
2000	Season Closed j			0							0				

[a] Guideline harvest based on pre-season harvest projection beginning in 1986.

[b] An additional opening on 6/14 for 6 hours resulted in no harvest.

[c] Gillnet fishery closed by Board of Fisheries action.

[d] Of 103 boats participating, 72 actually made deliveries.

[e] Of 105 boats participating, 101 actually made deliveries.

[f] Of 103 boats participating, 62 made deliveries at Montague Island and 90 made deliveries in the north-shore area.

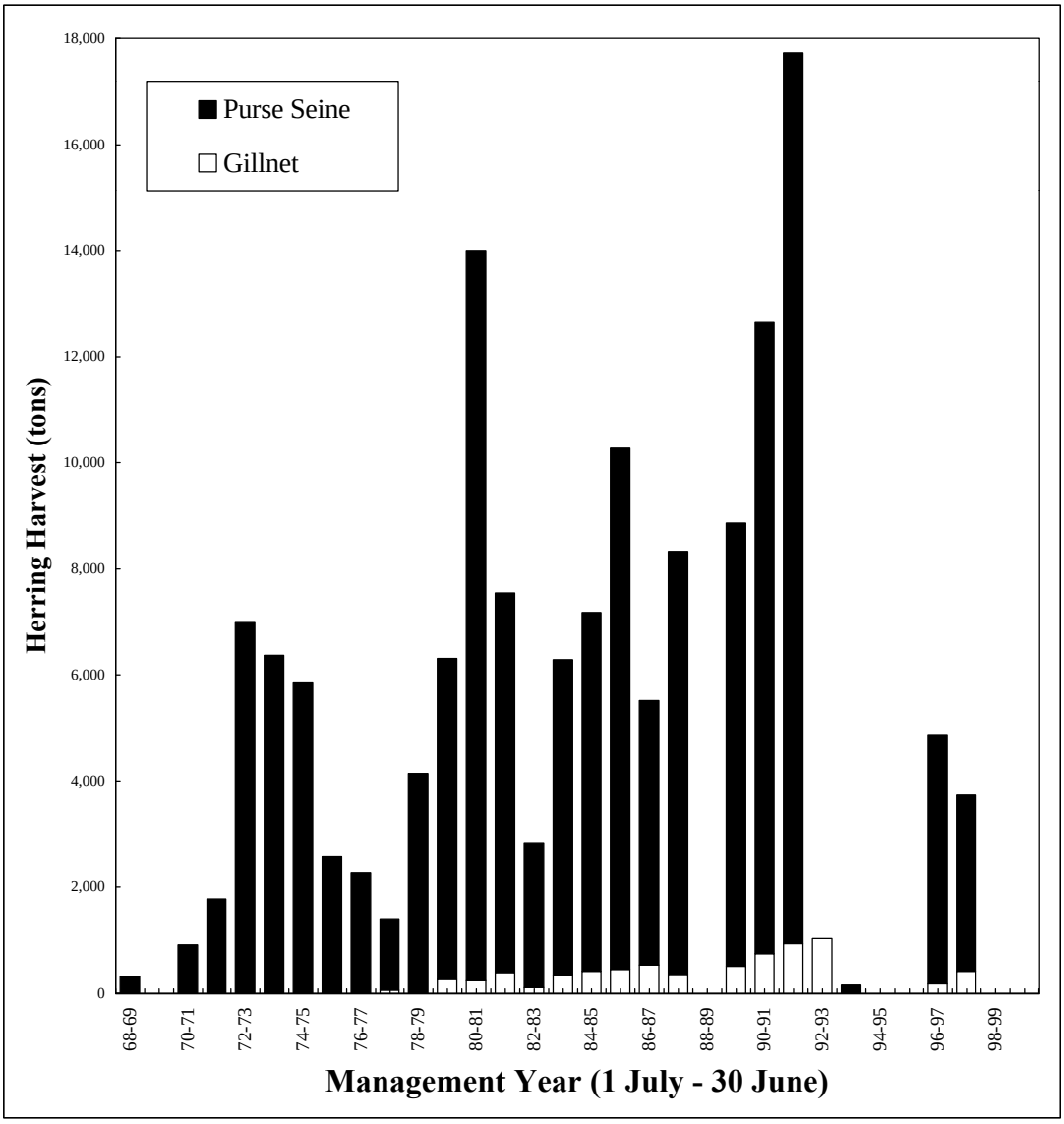
[g] All Pacific herring commercial sac roe and spawn-on-kelp fisheries in Prince William Sound were closed during the spring of 1989 due to the potential for contamination of catches from the T/V Exxon Valdez oil spill.

[h] Total for 1991 includes a 92.2 ton test fishing set made by ADF&G for aerial survey calibration.

[i] Total for 1992 includes a 192.5 ton test fishing catch made by ADF&G for aerial survey calibration.

[j] Season closed due to low herring abundance.

[k] Harvest for 1994 consisted of a single test fishing catch made by ADF&G for aerial survey calibration.



Appendix H.5. Prince William Sound commercial herring sac roe purse seine and gillnet harvest by management year, 1968-2000.

Appendix H.6. Pacific herring spawn-on-kelp harvests from natural spawning, Prince William Sound, 1969 - 2000.

Calendar Year	Fishery Dates	Hours	Effort (Divers)	Guideline Harvest (tons)	Harvest by Kelp Species and Grounds Price ($/lb)								Spawn-on-Kelp Harvest		Herring Utilized [a] (tons)
					Ribbon		Sieve		Fucus		Other				
					Percent	Price	Percent	Price	Percent	Price	Percent	Price	(lb)	(tons)	
1969	5/18-5/31		3										5,424	2.7	21.7
1970	4/19-6/06		34										190,374	95.2	761.5
1971	4/18-5/15		159										769,481	384.7	3,077.9
1972	4/30-5/20		397										600,453	300.2	2,401.8
1973	4/23-5/26		176										306,358	153.2	1,225.4
1974	4/22-5/04		143		Mostly Ribbon - Some Sieve and Hair				$0.60-0.75				580,588	290.3	2,322.4
1975	4/25-5/10		328										916,919	458.5	3,667.7
1976	4/21- ?		279										485,043	242.5	1,940.2
1977	4/27-12/31		104										417,000	208.5	1,668.0
1978	4/20-4/30		66	165	23%		50%				27% [b]		141,268	70.6	565.1
1979	4/25-5/03		97	200									474,242	237.1	1,897.0
1980	4/23-4/30	10	458	200	60%	$1.25	40%	$0.85					603,880	301.9	2,415.5
1981	4/25	12	196	200	38%	$1.25	60%	$0.85			2% [b]	$0.60	122,532	61.3	490.1
1982	5/05-5/08	73	152	187	83%	$1.42	11%	$0.95			6% [b]	$0.74	291,430	145.7	1,165.7
1983	4/27	12	185	187	51%	$2.00-2.45	35%	$1.50-1.70			14% [c]		298,362	149.2	1,193.4
1984	Season Closed [d]		225 [e]	187											
1985	5/06 & 5/08	20	106	169	51%	$1.25	49%	$0.50					60,832	30.4	243.3
1986	4/30-5/03	86	29	142	97%	$1.75		$0.80			[b]	$0.80	95,205	47.6	380.8
1987	4/15-4/17	44	59	103	90%	$1.70		$0.85			[b]	$0.80	176,485	88.2	705.9
1988	4/29 & 4/30	12	159	103	64%	$1.50	24%	$0.75-1.00			12% [b]	$0.75-1.00	194,762	97.4	779.0
1989	Season Closed [f]			110											
1990	4/21-4/22	16	134	104	37%	$0.99	6%	$0.52			57% [b]	$0.88	237,575	118.8	950.3
1991	5/11-5/17	95	48	195					100%	$0.75-0.85			215,147	107.6	860.8
1992	4/24-4/30	101	217	243	21%	$0.70			76%	$0.40	3%		504,663	252.3	2,018.7
1993	4/19-4/24	114	83	268					100%	$0.55			325,181	162.6	1,300.7
1994	Season Closed [g]			110											
1995	Season Closed [g]			0											
1996	Season Closed [g]			0											
1997	4/25 & 4/26	26.4	45	56.4					100%				52,800	26.4	211.2
1998	4/22-4/27	62	35	464	16%	$0.80			84%	$0.50			34,695	17.3	138.8
1999	Season Closed [g]			475											
2000	Season Closed [g]			0											

[a] Indicates the annual removal of reproductive capacity from the population based on the assumption that average fish roe recovery is 10%, and 80% of spawn-on-kelp harvest weight consists of eggs.

[b] Hair kelp.

[c] Mostly Macrocystis spp. Some hair kelp.

[d] Season remained closed due to lack of suitable spawn.

[e] Permits issued.

[f] All Pacific herring commercial sac roe and spawn-on-kelp fisheries in Prince William Sound were closed during the spring of 1989 due to the potential for contamination of catches from the *T/V Exxon Valdez* oil spill.

[g] Season remained closed due to low herring abundance.

Appendix H.7. Pacific herring spawn-on-kelp harvest produced in pounds, Prince William Sound, 1979 - 2001.

Calendar Year	Fishery Dates [c]	Effort				Guideline Harvest (tons)	Blades per Permit Holder		Spawn-on-Kelp Harvest (tons)			Herring Utilized [b] (tons)
		CFEC Permits [d]	Permits Committed [e]	Producing Permits [a] Closed [f]	Producing Permits [a] Open [g]		Closed [f]	Open [g]	Ribbon	Macrocystis	Total	
1979		2	0									
1980	4/14	14	4	2		8			0.9	0.4	1.3	16.6
1981	4/14	18	18	7		16			8.6	1.1	9.7	120.7
1982	4/29-5/10	25	20	18		26			25.1	0.5	25.5	319.2
1983	4/30-5/04	47	38	26		26			17.7	10.1	27.7	346.7
1984	4/24-5/08	65	45	37		26			6.4	18.8	25.2	315.1
1985	4/25-5/07	81	59	50		40			12.1	28.1	40.2	502.1
1986	4/21-4/28	104	82	81		60			0	72.2	72.2	903.0
1987	4/10-4/21	111	111	108		85			0	61.2	61.2	765.1
1988	4/12-4/23	122	122	119		85			0	123.2	123.2	1,540.5
1989	Season Closed [h]											
1990	4/11-4/26	128	128	122		118			0	98.8	98.8	1,235.3
1991	4/07-4/20	126	126	119		220	1,200		0	202.4	202.4	2,530.5
1992	4/07-4/24	127	127	127		276	1,770		0	242.2	242.2	3,027.7
1993	4/10-4/22	128	124	52		305	1,950		0	106.4	106.4	1,330.5
1994	Season Closed [i]											
1995	Season Closed [i]											
1996	Season Closed [i]											
1997	4/10-5/6	128	116	7	84	725	410	640	0	34.3	34.3	290.5
1998	j	128	36	13	20	823	425	660	0	10.7	10.7	104.3
1999	k	128	27	7	2	843	435	680	0	6.2	6.2	48.8
2000	Season Closed [i]					0						

[a] Number of permits that were successful in producing spawn-on-kelp product. Due to the group cooperation in this fishery production is frequently reported for a few individuals whose pounds did not produce spawn-on-kelp product.

[b] The equivalent harvest of Pacific herring due to stress mortality and the removal of reproductive capacity from the population based on the assumption that 12.5 tons of Pacific herring are used to produce 1 ton of spawn-on-kelp product.

[c] Dates that the fishery was opened to seines for the capture and placement of Pacific herring into pounds.

[d] Prior to 1994, Commssioner's permits issued to applicants registering prior to the March 1 deadline. After 1994, the number of permits represents limited entry permits. Beginning in 1997, permit holders were allowed to operate pounds in open or closed configuration, and required to state intended configuration prior to season.

[e] The number of individuals receiving an equal allocation of the guideline harvest. Prior to 1994 this represents the number of individual pounds constructed by the April 1 deadline. Beginning in 1997, this number represents permit holders stating intended configuration prior to season.

[f] A pound fished in a closed configuration consists of a rectangular floating frame with webbing suspended below, that encloses herring and kelp for period of time during spawning.

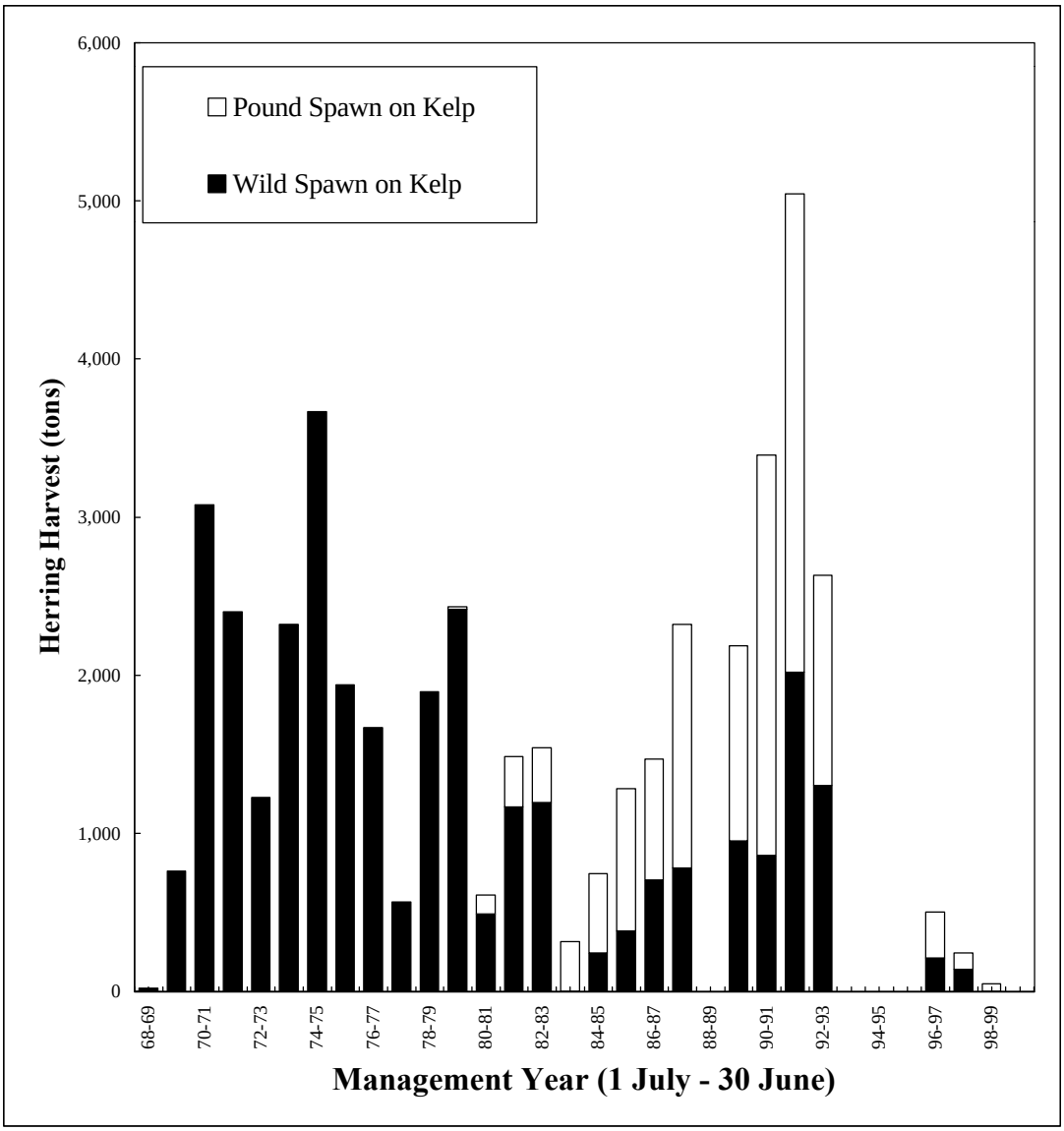
[g] A pound fished in an open configuration consists of a rectangular floating frame with either no webbing suspended below, or with webbing that permits volitional entry and exit of herring on at least one side.

[h] All Pacific herring commercial sac roe and spawn-on-kelp fisheries in Prince William Sound were closed during the spring of 1989 due to the potential for contamination of catches from the *T/V Exxon Valdez* oil spill.

[i] Season closed due to low herring abundance.

j Opening dates for each area were: Montague Island 4/04, Eastern 4/05, Northern 4/09, and Southeastern 4/13. All areas closed by regulation on 12/31/98.

k Opening dates for each area were: Montague Island 04/01, St. Matthews Bay 04/20. All areas closed by emergency order on 04/25/99.



Appendix H.8. Prince William Sound commercial spawn-on-kelp herring usage by management year, 1968-2000.

Appendix H.9. Prince William Sound commercial Pacific herring food/bait fishery effort and harvests, management years 1969-2000.

Harvest Management Year	Fishing Dates Opened	Fishing Dates Closed	Guideline Harvest	Purse Seine Effort (Boats)	Purse Seine Harvest (tons)	Pair Trawl Effort (Boats)	Pair Trawl Harvest (tons)	Mid-Water Trawl Effort (Boats)	Mid-Water Trawl Harvest (tons)	Otter Trawl Effort (Boats)	Otter Trawl Harvest (tons)	Total Harvest (tons)
1969-1970	10/01/69	06/30/70 [a]		-	14.0							14.0
1970-1971	10/01/70	06/30/71 [a]										0.0
1971-1972	10/01/71	06/30/72 [a]		-	20.0							20.0
1972-1973	10/01/72	05/09/73 [a]		-	9.0							9.0
1973-1974	08/27/73	04/17/74 [a]	[b]	-	8.5							8.5
1974-1975	07/15/74	03/10/75	[b]									0.0
1975-1976	06/01/75	06/25/75 [c]	[b]	4	226.7							226.7
1976-1977	02/01/77	03/09/77	[b]									0.0
1977-1978	10/01/77	02/28/78	[b]	-	17.0	-	145.3					162.3
1978-1979	10/16/78	? [d]	[b]	-	195.4	7	988.7	-	9.4	-	81.0	1,274.4
1979-1980	09/16/79	02/28/80 [e]	1,400	-	510.8	4	145.1	-	103.2	-	2.6	761.7
1980-1981	09/15/80	11/07/80	1,400	-	1,030.4	6	275.7					1,306.1
1980-1982	09/15/81	09/30/81	1,400	7	1,189.4	-	73.1					1,262.5
1982-1983	09/15/82	01/31/83	1,400	6	797.3							797.3
1983-1984	09/15/83	01/31/84	1,400	-	257.6							257.6
1984-1985	09/15/84	01/31/85	1,400	-	936.2							936.2
1985-1986	09/01/85	02/15/86	1,400	6	1,118.1							1,118.1
1986-1987	09/01/86	10/24/86	1,400	6	1,276.2							1,276.2
1987-1988	09/02/87	11/12/87 [f]	1,400	7	1,189.4							1,189.4
1988-1989	11/01/88	11/05/88	1,400	8	1,335.3							1,335.3
1989-1990	11/01/89	01/31/90	1,694	-	646.1							646.1
1990-1991	09/21/90	11/24/90 [g]	3,151	5	1,955.0			-	60.8			2,015.9
1991-1992	10/01/91	10/14/91	3,956	14	4,258.5							4,258.5
1992-1993	10/01/92	10/22/92	3,416 [h]	17	3,900.3							3,900.3
1993-1994	10/07/93	10/10/93	978 [i]	8	1,087.0							1,087.0
1994-1995		Season Closed [j]										0.0
1995-1996		Season Closed [j]										0.0
1996-1997	11/01/96	11/03/96	825	6	933.9							933.9
1997-1998 [k]	11/1/97,2/19/98	02/28/98	945	12	679.7							679.7
1998-1999	11/02/98	11/04/98, 11/06/98	967	11 [l]	1,003.3	-	-					1,003.3
1999-2000		Season Closed [j]										0.0
2000-2001		Season Closed [j]										0.0

[a] Openings set by regulation. Ending date coincides with regulatory ending of sac roe season.

[b] No Official quota, but unofficial goal was 1,500 tons.

[c] Harvest from special June food-and-bait fishery opening. Although this harvest actually occured at the end of the 1975 management year, it is included in the 1976 harvest management year to be consistent with other food-and-bait harvests which occur after spring sac roe fisheries.

[d] Fishery closed from 1 January to 6 January 1979.

[e] Fishery closed from 1 January to 15 February 1980.

[f] Fishing season opened by regulation on September 1, 1987 in the General District. The north-shore and east-shore Pacific herring districts opened on September 23. The season was closed by emergency order on October 6 for a period of five weeks, reopened on November 9, and closed for the duration of the 1987-88 season on November 12, 1987.

[g] Fishery open from September 21 until November 24. The Montague Island area was open from September 24 until November 24.

[h] Preseason guideline harvest level based on spawn deposition biomass estimate. Final quideline harvest based on age-structured analysis was issued in January 1993 and was 4,373 tons.

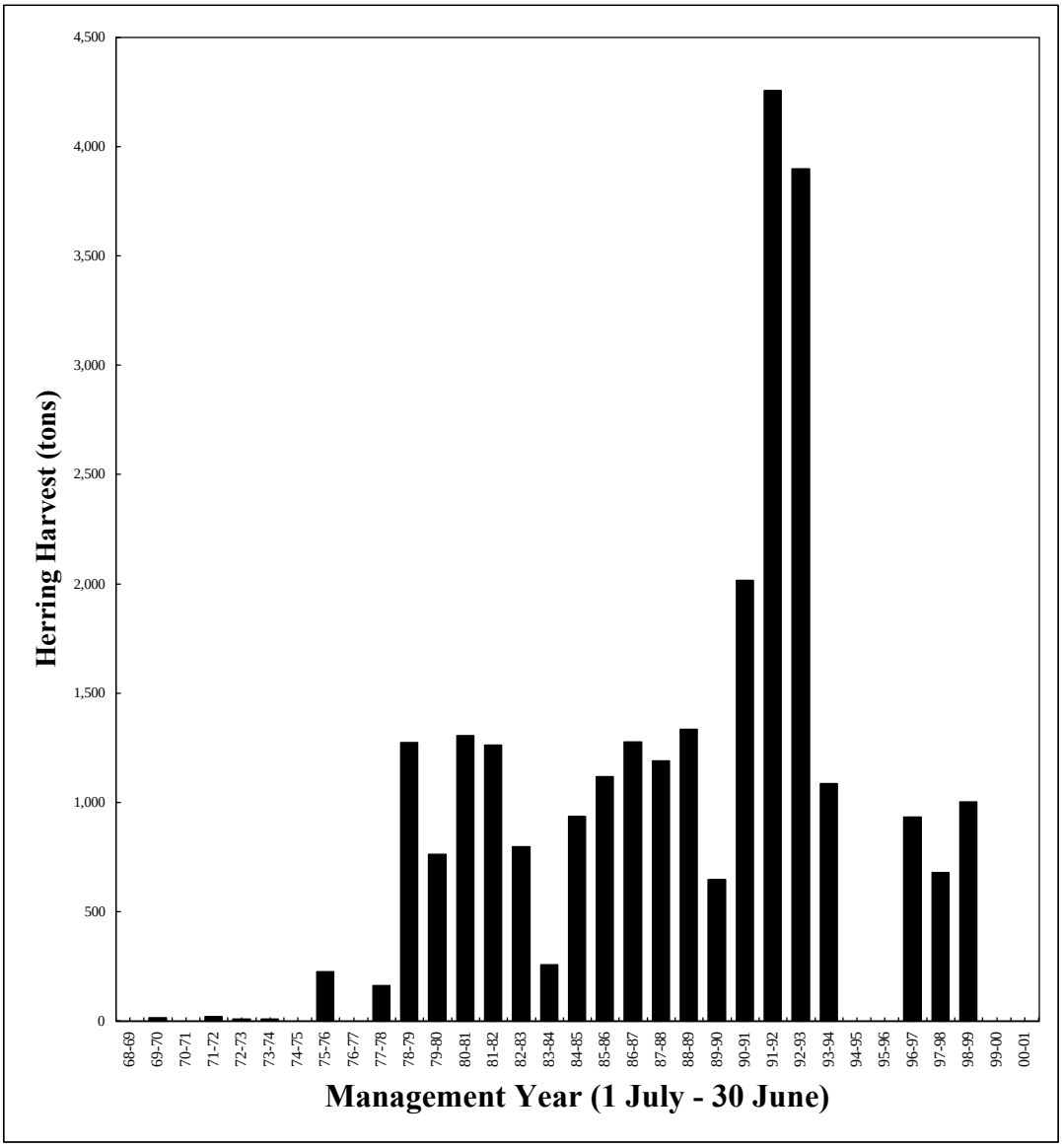
[i] Preseason guideline harvest level based on preliminary aerial survey biomass estimate of 40,000 tons.

[j] Season closed due to low herring abundance.

[k] Season reopened in spring 1998 based on final age structured assessment modelling. Of the total harvest, 578.1 tons were taken in November 1997 and 101.6 tons were taken in February 1998.

l Includes sale from ADF&G test fishing near Knowles Head, 31 October 1998.

Food/Bait Herring Harvest
Prince William Sound

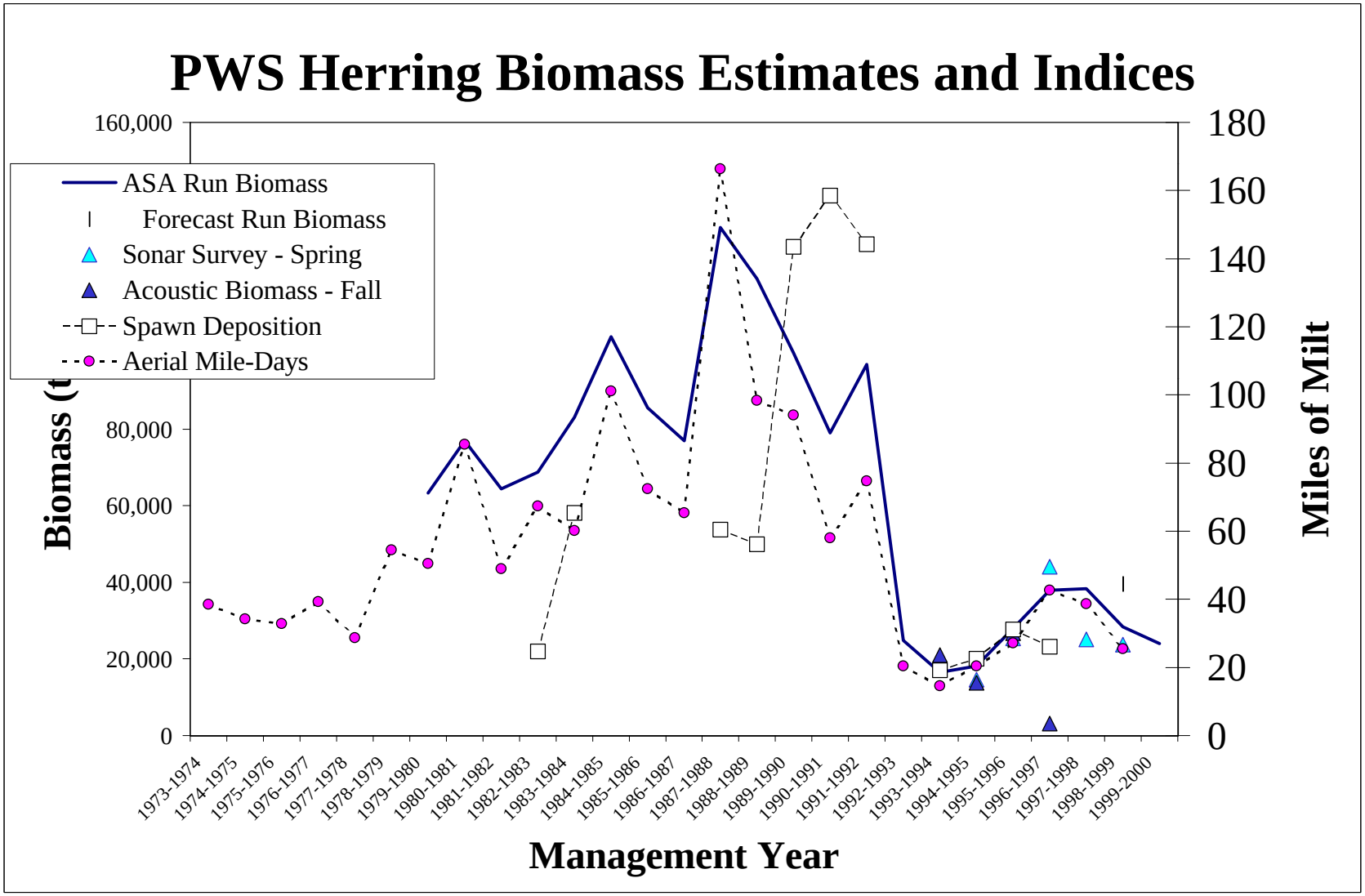


Appendix H.10. Prince William Sound commercial food/bait herring harvest, management years 1968-2000.

Appendix H.11. Annual Pacific herring biomass indices for harvest management years 1973-2000 and the forecast of prefishery run biomass for 2001, Prince William Sound.

Harvest Management Year	Total Spring Use and Harvest Mortality [a] (tons)	Aerial Survey Estimates: Peak Biomass Estimate [b] (tons)	Aerial Survey Estimates: Maximum Possible Observed Biomass [c]	Aerial Survey Estimates: Miles of Spawn [d]	Aerial Survey Estimates: Mile Days of Spawn [e]	Unexploited Escapement Biomass: Spawn Deposition Surveys [f] (tons)	Unexploited Escapement Biomass: Age Structured Analysis [g] (tons)	Pre-Fishery Run Biomass: Age Structured Analysis [g] (tons)	Observed Peak Acoustic Biomass Estimates: Fall (tons)	Observed Peak Acoustic Biomass Estimates: Spring (tons)	Prior Year Forecast (tons)
1973-1974	6,375	41,080	107,290	38.5	75.2						
1974-1975	5,854			34.2	42.4						
1975-1976	2,584	7,330	25,247	32.8	33.7						
1976-1977	2,267	16,830	17,460	39.3	73.5						
1977-1978	1,391	13,410	36,540	28.7	36.3						
1978-1979	4,138	42,100	107,390	54.5	73.2						
1979-1980	6,323	62,110	122,050	50.5	73.9		58,221	63,290			
1980-1981	14,124	77,810	161,690	85.4	140.1		63,494	76,890			
1981-1982	7,861	68,790	97,620	49.0	65.1		56,823	64,366			
1982-1983	3,181	41,850	107,710	67.4	99.8	22,000 [h]	65,949	68,753			
1983-1984	6,604	58,870	158,760	60.1	86.8	58,089	77,021	83,037			
1984-1985	7,679	20,830	60,954	101.2	149.5		96,694	104,034			
1985-1986	11,180	15,180	54,820	72.4	152.3		74,740	85,543			
1986-1987	6,281	26,530	52,192	65.3	155.9		71,773	76,891			
1987-1988	9,871	34,270	67,175	166.3	236.9	53,785	123,346	132,633			43,992
1988-1989	[i]	56,915	186,708	98.4	185.8	49,914	119,237	119,237			54,899
1989-1990	10,103	57,900	145,013	94.1	144.4	127,478	89,613	99,783			51,692
1990-1991	15,196	42,765	141,375	58.0	64.8	140,964	64,836	78,985			96,666
1991-1992	20,752	53,835	130,569	74.7	99.5	128,263	77,598	96,860			121,342
1992-1993	2,360	20,725	109,865	20.4	40.8		22,735	24,873			134,133
1993-1994	151	19,640	154,008	14.6	20.0	17,069	16,559	16,559	20,998		29,787
1994-1995	0	7,113	20,868	20.4	32.3	20,022	18,104	18,104	13,840	14,643	19,009
1995-1996	0	10,691	37,771	27.2	39.1	27,670	27,909	27,909	26,776	25,353	24,332
1996-1997	5,170	10,858	57,114	42.7	56.0	23,171	33,387	37,925	3,086	44,095	37,599
1997-1998	3,849	13,817	50,124	38.7	48.5		34,726	38,389		25,045	38,640
1998-1999	49	6,366		25.4	37.8		28,310	28,362		23,802	39,557
1999-2000	0			19.5	24.6			23,987			
2000-2001											

[a] Represents the common property seine and gillnet sac roe harvest, and equivalent use of herring in closed pound SOK fisheries.
[b] Largest single day aerial estimate of Pacific herring biomass in short tons.
[c] The sum of all daily aerial biomass estimates for a given year.
[d] Total linear miles of spawn.
[e] The sum of the daily observed linear miles of Pacific herring spawn.
[f] Estimates are made from underwater surveys of spawn deposition.
[g] Unexploited escapement and run biomass estimates from age structured analysis, February 1998.
[h] Partial estimate of spawning biomass from feasibility study.
[i] All Pacific herring commercial sac roe and spawn-on-kelp fisheries in Prince William Sound were closed during the spring of 1989 due to the potential for contamination of catches from the *T/V Exxon Valdez* oil spill.



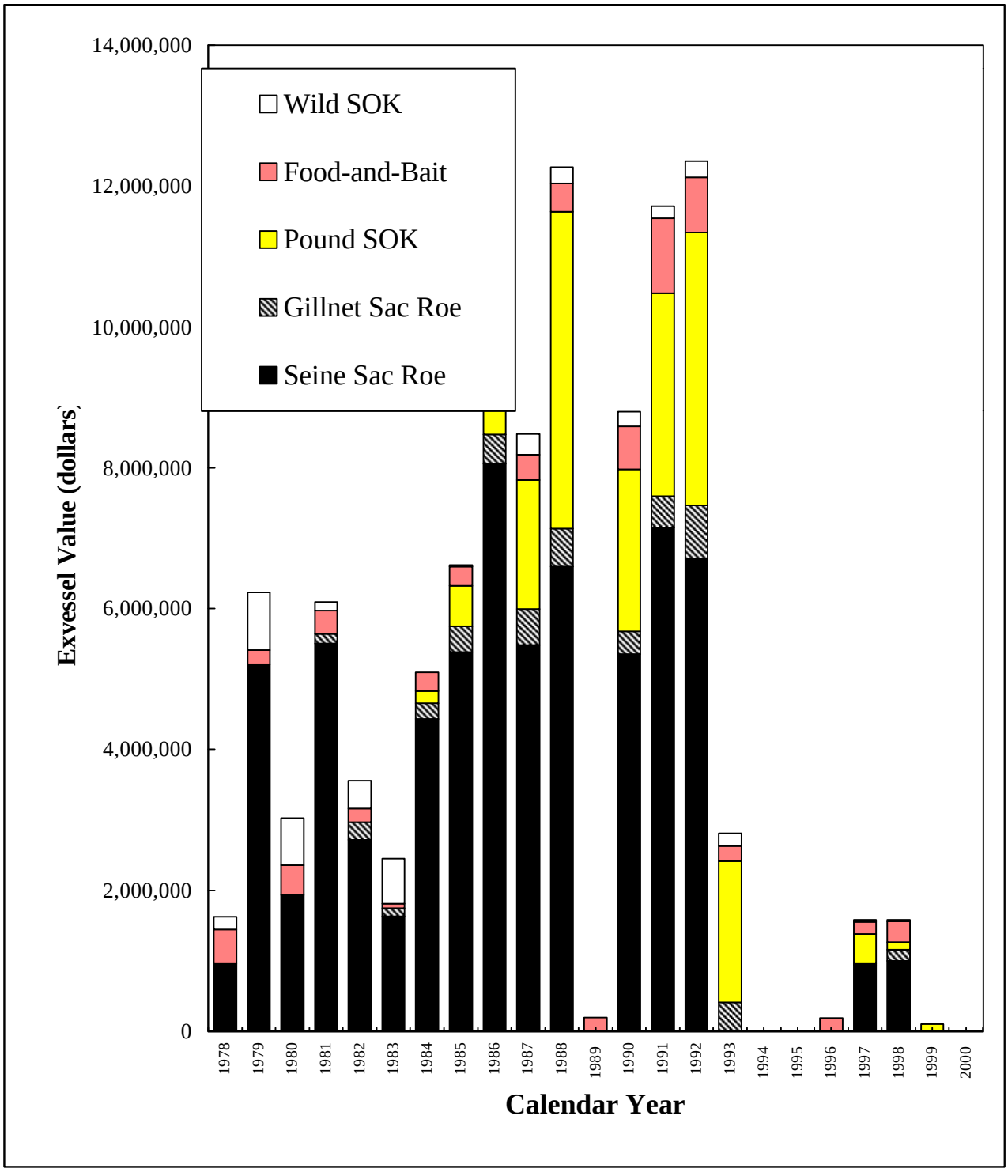
Appendix H.12. Prince William Sound annual herring biomass indices by management year, 1973-1999, and forecast run biomass for 2000 from ASA modeling.

Appendix H.13. Mean price and estimated exvessel value of the commercial Pacific herring harvest by gear type based on verbal post season estimates from processors and permit holders, Prince William Sound, calendar years 1978-2000.

Calendar Year	Sac Roe Fisheries				Spawn on Kelp Fisheries				Food-and-Bait Fishery		
	Purse Seine		Gillnet		Wild Spawn on Kelp		Pounds		Mixed Gear		
	Price per ton	Total Value	Price per ton	Total Value	Price per lb	Total Value	Price per lb [a]	Total Value	Price per ton	Total Value	TOTAL VALUE
1978	$ 720	$ 956,800			$ 1.25	$ 175,000			$ 380	$ 489,820	$ 1,621,700
1979	$ 1,260	$ 5,213,880			$ 1.74	$ 821,280			$ 300	$ 196,800	$ 6,231,960
1980	$ 320	$ 1,933,760			$ 1.09	$ 667,080			$ 300	$ 424,800	$ 3,025,640
1981	$ 400	$ 5,508,000	$ 580	$ 135,720	$ 1.00	$ 122,000			$ 260	$ 328,120	$ 6,093,840
1982	$ 380	$ 2,716,240	$ 640	$ 251,520	$ 1.29	$ 397,320			$ 220	$ 194,260	$ 3,559,340
1983	$ 600	$ 1,634,400	$ 1,040	$ 109,200	$ 2.10	$ 634,200			$ 260	$ 70,980	$ 2,448,780
1984	$ 760	$ 4,435,360	$ 640	$ 218,880	NO HARVEST		$ 3.50	$ 176,439	$ 260	$ 265,460	$ 5,096,139
1985	$ 760	$ 5,380,800	$ 900	$ 371,700	$ 0.48	$ 19,200	$ 7.09	$ 569,058	$ 250	$ 279,500	$ 6,620,258
1986	$ 820	$ 8,058,960	$ 920	$ 412,160	$ 1.70	$ 159,800	$ 8.00	$ 1,155,200	$ 180	$ 229,680	$ 10,015,800
1987	$ 1,100	$ 5,480,200	$ 960	$ 511,680	$ 1.70	$ 299,200	$ 15.00	$ 1,836,000	$ 300	$ 356,700	$ 8,483,780
1988	$ 840	$ 6,600,000	$ 1,400	$ 537,000	$ 1.20	$ 232,000	$ 18.00	$ 4,500,000	$ 300	$ 400,590	$ 12,236,500
1989	SEASON CLOSED								$ 300	$ 193,830	$ 193,830
1990	$ 640	$ 5,351,744	$ 640	$ 323,456	$ 0.90	$ 213,840	$ 11.40	$ 2,305,080	$ 300	$ 605,130	$ 8,799,250
1991	$600	$ 7,153,800	$ 600	$ 445,200	$ 0.80	$ 172,160	$ 9.00	$ 2,880,000	$ 250	$ 1,064,625	$ 11,715,785
1992	$ 400	$ 6,713,680	$ 800	$ 752,480	$ 0.46	$ 232,116	$ 8.00	$ 3,875,200	$ 200	$ 780,060	$ 12,353,536
1993	NO HARVEST		$ 400	$ 411,960	$ 0.55	$ 178,860	$ 10.00	$ 2,000,000	$ 200	$ 217,400	$ 2,808,220
1994	SEASON CLOSED								SEASON CLOSED		
1995	SEASON CLOSED								SEASON CLOSED		
1996	SEASON CLOSED								$ 200	$ 187,000	$ 187,000
1997	$ 200	$ 940,600	$ 80	$ 14,080	$ 0.61	$ 32,000	$ 8.00	$ 426,816	$ 250	$ 170,000	$ 1,583,496
1998	$ 300	$ 999,000	$ 375	$ 156,000	$ 0.65	$ 23,000	$ 5.00	$ 107,000	$ 295	$ 296,000	$ 1,581,000
1999	SEASON CLOSED						$ 8.00	$ 99,000	SEASON CLOSED		
2000	SEASON CLOSED								SEASON CLOSED		

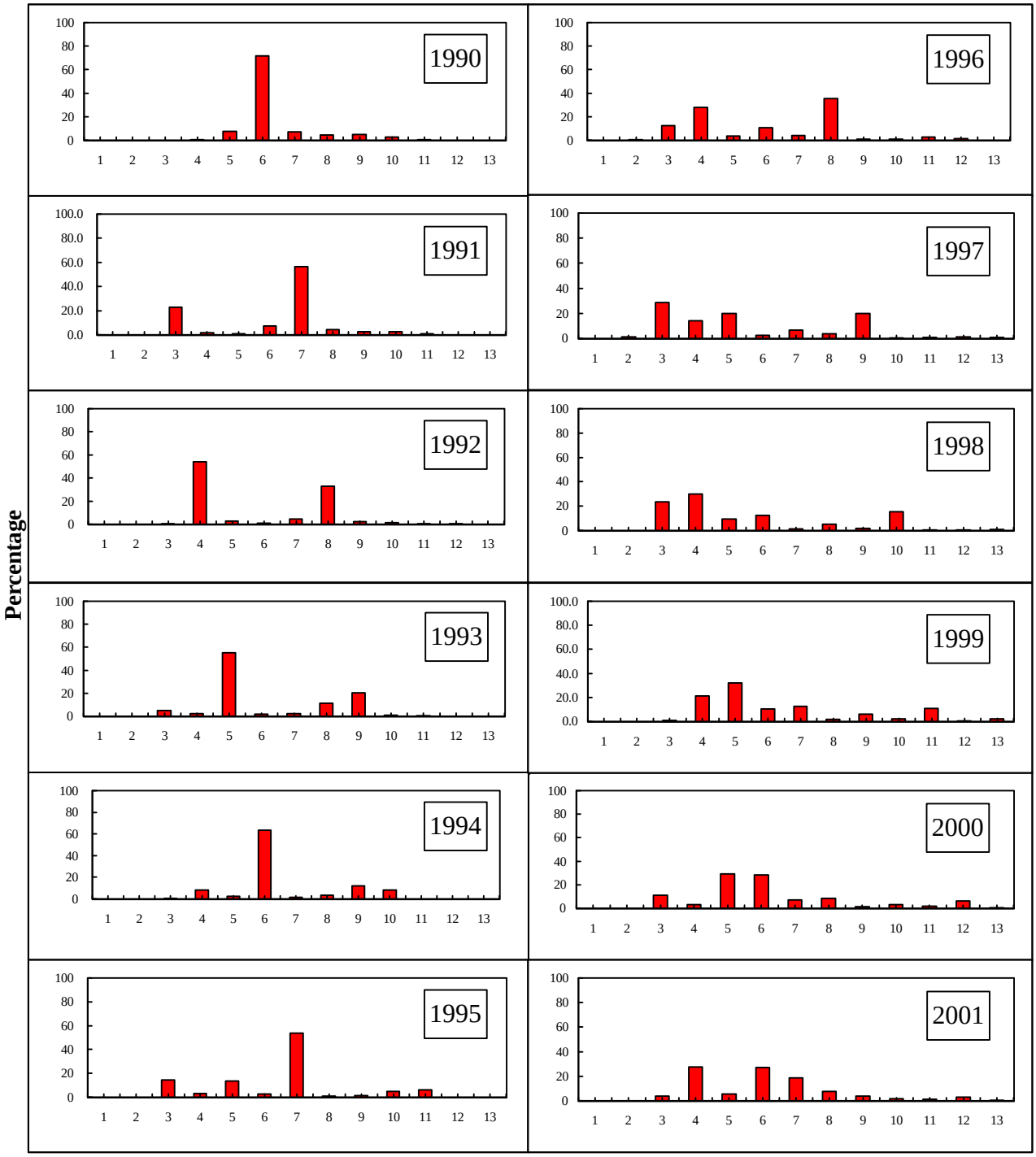
[a] The price per pound for spawn on kelp in pounds is based on the final product weight, not harvest weight.

Exvessel Value of Herring Fisheries
Prince William Sound



Appendix H.14. Average annual exvessel value of commercial herring fisheries, Prince William Sound, calendar years 1978-2000.

Prince William Sound Herring Spring Run Biomass
Age Composition



Appendix H.15. Percentage contribution by weight of each age to the spring run biomass, Prince William Sound, 1989-2000.